UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL ENVIRONMENTAL SATELLITE, DATA
AND INFORMATION SERVICE
Silver Spring, Maryland 20910

24 SEP 2001

MEMORANDUM FOR PARTIES INTERESTED IN THE NPOESS ENGINEERING AND MANUFACTURING DEVELOPMENT (EMD) AND PRODUCTION ACQUISITION

FROM: John Inman, Contracting Officer
NPOESS Integrated Program Office
8455 Colesville Rd Ste 1450
Silver Spring MD 20910

SUBJECT: Early Draft RFP Release, Comments Invited

We are pleased to release this early draft of portions of the RFP for the NPOESS EMD/Production acquisition as part of our on-going market research efforts. This is an early draft, and we plan on releasing a complete draft in November 2001. The purpose of this early draft is to obtain your comments and thoughts as soon as possible so that you can help shape the forthcoming complete draft RFP.

You may provide comments on any topic relating to the draft RFP, but we are especially interested in comments relating to the CLIN structure, the Section H clauses, and evaluation instructions and criteria (Sections L and M), and the incentivization approach. We do not promise to catalogue and respond to each comment, but we do intend to use your inputs as we prepare the complete draft RFP. Thus, we invite you to be thorough and as forthcoming in your comments so that a first-class complete draft solicitation will be ready in November 2001. *You may provide comments on our approaches, alternate approaches, or completely different solutions*. You may provide general guidance for our consideration and specific text for inclusion in the complete draft. You may provide analysis and "what-if" discussions as you illustrate how our words might drive industry's behavior. In short, you may provide any information you think might be helpful to us as we prepare the complete draft RFP. Your submission may be made to me at the above address, or electronically at <john.inman@noaa.gov>, on or before 11 Oct 2001.

Please note that the Government does not contemplate providing any GFP/GFE, except for the SAR and DCS instruments, but offerors will be free to propose use of GFP/GFE. If you feel certain property or facilities should be identified up-front as GFP/GFE, please discuss this in your response.

Like this incomplete and early draft, the complete draft RFP will be posted to the NPOESS electronic library at <http://npoesslib.ipo.noaa.gov> on or about 15 Nov 2001. We appreciate your interest in NPOESS, and look forward to your input.

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Executive Summary

Program Overview

The National Polar-orbiting Operational Environmental Satellite System **(**NPOESS) program integrates the capabilities and products provided by the Department of Commerce (DOC) Polar Orbiting Environmental Satellites Program (POES), Department of Defense (DoD) Defense Meteorological Satellite Program (DMSP) and maintains the long-term climate record collection of NASA. This single converged system will satisfy the needs of defense, civil, commercial and scientific communities. The NPOESS mission is to provide timely and accurate data to numerous users for various operational, environmental and scientific applications.

A tri-agency Integrated Program Office (IPO) manages the NPOESS program. The IPO is concluding Program Definition and Risk Reduction (PDRR) activities initiated in 1997 that focused on developing system architectures and reducing risks, and preparing to enter the Engineering and Manufacturing Development (EMD) and Production phase. The IPO plans to select a single systems contractor with Total Systems Performance Responsibility (TSPR) to accomplish the EMD and production programs. During EMD, the TSPR contractor will: manage completion of NPOESS sensor development; provide two of the three primary satellite sensors and support the integration for the National Aeronautics and Space Administration's (NASA) NPOESS Preparatory Project (NPP); develop, deliver and support the satellites' Command, Control and Communication (C3) and Interface Data Processing (IDP) segments; develop, deploy, and integrate the NPOESS space segment; integrate the NPOESS space segment with the launch support segment; develop and deploy the NPOESS support system; develop, deploy and support the software portion of the NPOESS field terminals; conduct a progressive integration, test and acceptance program and, support the NPOESS system through Initial Operational Capability (IOC). During production, the TSPR contractor will integrate, deploy and support additional space and launch support segments.

The TSPR contract will be awarded in the third quarter of CY 2002. The TSPR contractor will provide program support through NPOESS Initial Operational Capability (IOC). System support following IOC will be procured through a separate contractual action. The funding profile shown in the figure reflects target funding available to fund the TSPR contract in each Government Fiscal Year.

Cumulative Funding Profile

	TY$M	FY02	FY03	FY04	F05	FY06	FY07	FY08	FY09
Threshold		68	446	942	1413	1930	2504	2885	3238
Objective		60	415	884	1331	1822	2368	2732	3070
Excludes:	Government Program Office								
	Standard Launch Services					75		75	75

Figure EX-1 Contract Funding Profile

Program Issues, Challenges and Risks

The results of the NPOESS PDRR phase and the NPOESS program acquisition strategy frame the IPO approach to selecting the TSPR contractor for EMD and production. The stringent technical requirements associated with meeting the needs of DoD, DOC, NASA, commercial and scientific communities mandate selection of a single system with excellent design performance delivered through a rigorous and thorough design approach. Some of the most challenging requirements include the ability to complete development of government identified sensors, accomplish parallel sensor and system development, manage complex system integration, and achieve an aggressive schedule for delivering sensors, C3 and IDP segments to NPP. The selection of a TSPR contractor with a demonstrated TSPR track record and proven system engineering and integration, risk management performance is a high priority.

Performing NPOESS development and production using the TSPR approach requires unique challenges. Although the TSPR contractor will have the authority to manage system configuration to achieve system level performance, the government has identified specific sources for a number of Space Segment sensors (government identified instruments). Additionally, while system level performance is specified in terms such as precision and accuracy of specific Environmental Data Records (EDRs), the specific needs of specific NPOESS customers force the government to maintain significant insight into development of Raw Data Records (RDRs) generated by the government identified instruments.

Source Selection Philosophy

The overarching objective of the NPOESS EMD and Production source selection process is to conduct a source selection focused on evaluating each offeror's ability to successfully address key NPOESS program systems engineering, integration, and risk. Achieving this objective requires that the government obtain a complete and thorough understanding of each competitor's offer, and that industry understands the government's information requirements, how this information will be evaluated and what it takes to win. The government will minimize the effort required to respond to this Request For Proposal (RFP) by: limiting the size of proposal documents to 250 pages plus cost data; making maximum use of data developed and delivered during the PDRR phase; expanding the scope of the PDRR Preliminary Design Review and making it part of source selection; and, by creating a source selection environment focused on communication.

Evaluation Criteria

Evaluation criteria for this competition flow directly from the key NPOESS issues, challenges and risks. A balanced and integrated evaluation will be conducted of each offeror's proposal. The evaluation will consider four factors; Mission Capability, Proposal Risk, Past Performance and Cost. Mission Capability, Proposal Risk and Past Performance are weighted equally, each greater than cost, reflecting the program's interest in balancing performance and risk and in selecting a contractor with proven TSPR capability, capable of delivering a program of this magnitude on schedule and on

cost. Within Mission Capability, five subfactors will be evaluated; *(i)* System Performance, *(ii)* Segment Design, *(iii)* Management and Organization *(iv)* Planning, and *(v)* Systems Engineering Integration and Test,. The first three of these subfactors are equally weighted, reflecting the government's concern with obtaining a system that can meet all of the needs of a diverse customer population while successfully managing the challenges of parallel development, complex system integration and an aggressive schedule. This evaluation structure is intended to identify and select a winning TSPR contractor with the following characteristics: proven capability to organize and direct the industrial team and to accept and execute TSPR; a program management organization with proven, team wide management and control processes and tools; a pervasive, disciplined system engineering process focused on driving out risk and cost and managing complex system integration; detailed, integrated, low risk program plans and integrated management framework; a design that delivers the performance that we require; and, a low risk development process.

Incentivization

The NPOESS EMD and Production program offers industry the opportunity to realize commercial rates of return. The EMD contract will be a cost type contract. It will provide a base fee to ensure adequate cash flow for successful program execution, an award fee that provides substantial returns for successful technical, schedule and cost management, and mission success fees awardable on achievement of significant program events and on-orbit performance. The production line items will be fixed price type options. During production, cost control is incentivized through a 50/50 share line, successful technical and schedule management is recognized through an award fee and system reliability and durability rewarded through on orbit incentives.

Shared Ownership

The NPOESS program provides an opportunity to re-define how government and industry cooperate to procure and deliver goods and services. The IPO has created the concept of shared ownership, a relationship between government and industry where risk and returns are shared. This management approach depends upon highly integrated management teams to ensure adequate government insight and oversight while maintaining TSPR by industry. Shared ownership offers the potential to harness the efficiency of commercial practices to significantly reduce the cost of major system acquisitions. Active industrial participation in every phase of developing the RFP and the framework of the source selection will contribute significantly to developing the shared ownership environment.

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RFP Attachment 1, Statement of Objectives (SOO) Annotated Mock-up

1.0 Introduction

1.1 Program Background. The National Polar-orbiting Operational Environmental Satellite System (NPOESS) program was designated by Presidential Decision Directive as the single satellite system replacing the Department of Commerce (DOC) Polar-orbiting Operational Environmental Satellites (POES) and the Department of Defense (DoD) Defense Meteorological Satellite Program (DMSP) satellites. To accomplish this mission, the two-satellite DMSP and the two-satellite POES constellations will be replaced by NPOESS satellites in three orbital planes.

1.2 NPOESS Mission Description. The NPOESS will remotely sense global and regional environmental data from space, transmit raw data to ground terminals, process it into Environmental Data Records (EDRs), and disseminate it to civil and military users. Environmental data will include radiometric observations of the atmosphere and cloud cover imagery, as well as other specialized environmental, climatic, terrestrial, oceanographic, and solar-geophysical data. For the purposes of TSPR responsibility in this acquisition, an Initial Operational Capability (IOC) will be declared when the 1330 and 1730 Local Time Ascending Node (LTAN) NPOESS satellites and their associated C3 and IDP Segments are operational and all weather centrals are receiving processed data, and field terminal software is available. NOTE: The definition of Initial Operational Capability (IOC) might be changed before release of the next draft RFP.

2.0 Program Objectives

2.1 To provide a single, national, polar remote-sensing capability to acquire, receive and disseminate global and regional environmental data,

2.2 To achieve National Performance Review (NPR) cost savings through the convergence of DoD and DOC environmental satellite programs,

2.3 To incorporate, where appropriate, technology transitioned from the National Aeronautics and Space Administration, Office of Earth Science Enterprise programs.

3.0 Engineering & Manufacturing Development

3.1 Phase Objective. The overall objectives of the NPOESS EMD effort are the completion of the final system design and the fabrication, test, deployment and support necessary to provide a capability for satellite environmental remote sensing sustainable for the program life-cycle.

3.2 System Development, Integration, System Engineering and Ground System Deployment Objectives.

3.2.1 Complete NPOESS development to the Critical Design Review (CDR) level, which will include obtaining approval of all final external interface requirements.

3.2.2 Track the progress of the Government's Windsat and NAST and other research programs and infuse technology lessons learned from these experiments to improve NPOESS performance.

3.2.3 Complete delivery of C3 and IDP and Field Terminal segments to support the projected NPOESS launch schedule and as specified in Annex B to Section L, IMP and IMS Instructions. Provide for a seamless installation and integration of the IDP and C3 Segments into their host facilities. Provide documentation, training, and personnel for the operation, maintenance, and upgrading of these systems through IOC.

3.2.4 Incorporate the current Government initiated sensor developments into the EMD design. Procure (or develop), integrate, and test sufficient instruments to achieve system requirements.

3.2.5 Complete delivery to the NPP satellite contractor templates; models; and flight-qualified VIIRS and CrIS with associated ground support equipment; and engineering support for development of ICDs and integration & test and on-orbit activation plans and procedures in time to support integration for NPP launch as specified in the Annex B to Section L, IMP and IMS Instructions.

3.2.6 Deliver and support C3 and IDP segments in time to support the projected NPP launch schedule as specified in the Annex B to Section L, IMP and IMS Instructions. Provide for a seamless installation and integration of the IDP and C^3 Segments into their host facilities. Provide documentation, training, and personnel for the operation, maintenance, and upgrading of these systems through IOC.

3.2.7 Operate and support the NPP satellite, C3 and IDP segments and apply lessons learned to the continued development of NPOESS.

3.2.8 Apply lessons learned to efficiently and effectively transition appropriate NPP systems, subsystems, algorithms, and test facilities to NPOESS.

3.2.9 Deliver the OMPS instrument for a flight of opportunity as specified in the Annex B to Section L, IMP and IMS Instructions.

3.2.10 Develop instrument and system calibration plans and participate in the on-going calibration efforts.

3.3 C1 & C2 Manufacturing and Planning for Production. Complete final sensor and satellite bus manufacturing and planning through on-orbit checkout, and calibration and validation activities required to achieve a launch callup capability for NPOESS satellite(s) to support the launch schedule as specified in the Annex B to Section L, IMP and IMS Instructions. The production strategy must accommodate the interchangeable configuration and launch of any satellite into any orbit to support backup and replacement requirements. It is the governments objective that the the satellite integrate with the launch vehicle in accordance with the Evolved Expendable Launch Vehicle (EELV) Standard Interface Specification.

3.4 System Performance Verification. Implement and support a contractor and Government combined test and evaluation program (i.e. Combined Test Force (CTF)) encompassing both developmental and operational tests. Minimize the cost and time for testing while assuring an acceptable level of performance risk. Therefore, verification of all specified requirements is the objective of qualification testing performed on first fabrication articles of the Space Segment. Subsequent Space Segment fabrication articles will be less exhaustively tested in acceptance tests. Ground Segment articles with small production quantities will undergo combined qualification and acceptance testing (integrated system testing) at their installation sites.

3.4.1 Qualification Testing.

3.4.1.1 Perform simulated end-to-end ground system throughput testing, and operational EDR performance testing including error sources under a broad range of conditions.

3.4.1.1.1 Validate EDR requirements by analysis, modeling, and/or simulation based on the instrument design and performance characteristics and the contractor's operational algorithms. All relevant sources of error, including those associated with the scene radiance, instrument, spacecraft, data transmission, and algorithms, shall be taken into account. Analysis, modeling, and/or simulation shall be sufficiently extensive in scope to verify EDR requirements are met under a broad range of conditions that are representative of those occurring in nature, including both typical and extreme conditions. For simulations involving random variable generation, a sufficient number of iterations shall be performed for each test case or standard scene to ensure statistical errors are negligible compared to the EDR attribute value being validated.

3.4.1.1.2 Perform end-to-end compatibility tests to ensure mission data can be received and processed, spacecraft commanding can be performed under all conditions and to detect and resolve any flaws in the interface designs prior to the acceptance and deployment of the operational units. Tests of the IDPS and C3 ground equipment and computer software will be performed on integrated configuration items installed in an operational system wherever practical. Ideally, these tests will be conducted at target sites with operational personnel, enabling early Operational Assessment opportunities.

3.4.1.2 Perform protoqualification-strategy testing following tailored guidance of MIL-STD-1540C on the first article manufactured of each space component type and vehicle. Subsequent flight units will be acceptance level tested.

3.4.2 Acceptance Testing

3.4.2.1 Perform Space Segment component testing following tailored MIL-STD-1540C guidance.

3.4.2.2 Conduct Factory Acceptance Tests (FAT) and Site Acceptance Tests (SAT) of individual segments. Major ground segment links will be verified prior to launch. These links include all IDP and C^3 Segment elements, and a yet to be determined number of field terminal units.

3.4.2.3 Perform integrated system tests of the IDPS and C3 ground equipment and computer software on integrated configuration items installed in an operational system wherever practical. Ideally, these tests will be conducted at target sites with operational personnel, enabling early combined Operational Test & Evaluation opportunities.

3.5 Initial Deployment. Support NPP mission system operational tests in preparation for mission readiness reviews and NPP Launch. Launch, checkout, calibrate, validate, operate and support sufficient NPOESS satellites to achieve IOC. Launch services will be provided by the Government with the contractor supporting for both NPP and NPOESS satellites.

3.6 Interim Support. Establish an integrated system life-cycle supportability concept/design, consistent with system readiness/availability/dependability and LCC goals. Develop and define an optimized support infrastructure for Test & Evaluation (T&E) activities, production and deployment. Define ILS T&E Requirements, including Pre-operational support requirements. Deliver, install, activate, and deploy the total system support infrastructure, including site activation and that required to sustain initial operations -- i.e., Interim Contractor Support (ICS)

through IOC -- and plan to transition to full operations. Provide technical and program support needed to sustain the operational system at the required performance and cost objectives.

4.0 Production

4.1 Phase Objective. The overall objectives of the NPOESS Production effort are the completion of the fabrication, test, deployment and support necessary to provide a capability for satellite environmental remote sensing for 10 years.

4.2 Satellite Production, Transportation and Deployment. Complete all sensor, spacecraft bus, and satellite production, through on-orbit checkout, and calibration and validation activities required to maintain the required operational availability throughout the NPOESS mission life. The production strategy must accommodate the interchangeable configuration and launch of any satellite into any orbit to support backup and replacement requirements.

4.3 Product Improvement. Infuse technology developments throughout NPOESS life cycle to expand system utility through instrument modifications and further exploitation of collected environmental data.

5.0 Cost Reduction Initiatives

5.1 Objective. Corporate commitment to achieve the contract objectives described above and provide a foundation for successful long-term partnership (i.e. life of program) based on tangible guarantees of performance (milestone accomplishment and mission integrity), commitment to resource staffing, and innovative corporate business initiatives targeted at accelerating future architecture migration and NPOESS objectives.

Life Cycle Cost Reduction Process. Conduct cost analyses and trades assuring a continuing cost effective implementation of NPOESS, use efficient long-lead procurement and sparing philosophies, maintain an efficient skill mix as the program matures, develop credible cost reduction estimates/recommendations based on cost-reduction opportunities identified during development and production, and provide information to support the development of government life cycle cost estimates. Share cost reductions to improve the contractor's Return on Sales (ROS) as shown in the example in Figure 1 below.

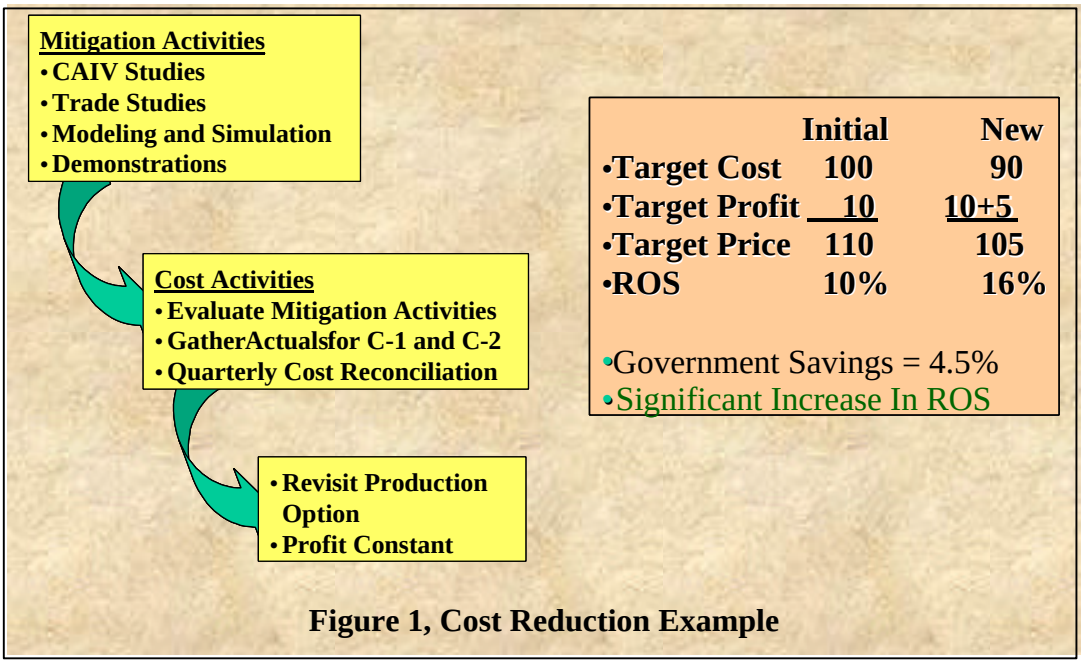

Figure 1, Cost Reduction Example

6.0 Management and Control

6.1 Objective. Provide flexible and innovative management of program cost, schedule, performance, risks, contracts and subcontracts, other agencies and data required to deliver and sustain an effective and affordable system.

6.2 Management and Control Process. Manage the EMD/Production program via the Integrated Management Framework as shown in Figure 2 below. The Government will conform to the contractor's desired organizational structure and fully expects a matrix management approach to personnel assignment.

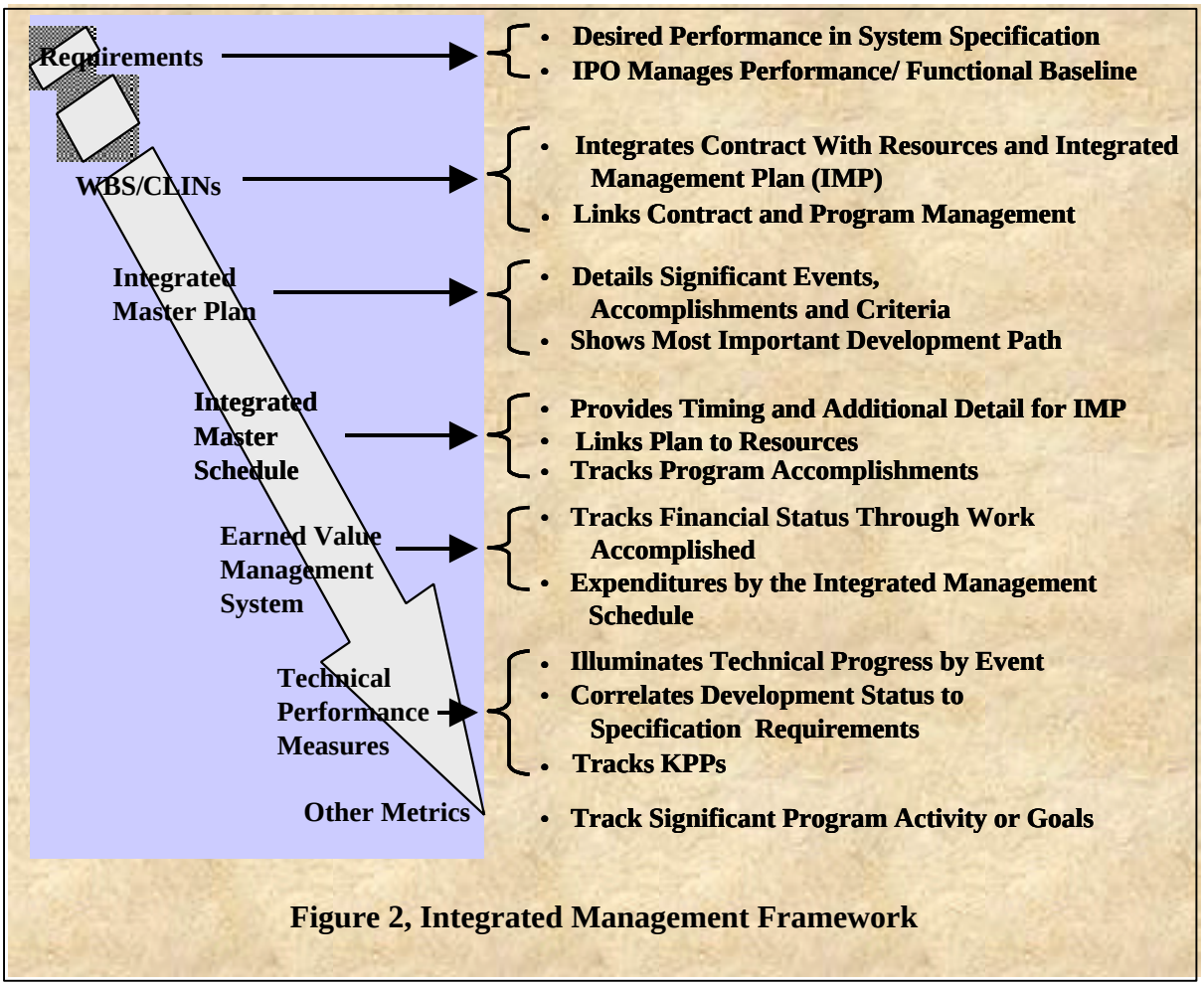

Figure 2, Integrated Management Framework

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ITEM	SUPPLIES OR SERVICES	Qty Purch Unit	Unit Price Total Item Amount
0100		1 LOT	

Noun: RDT&E
ACRN: 9
Security: U
NSN: N - Not Applicable
Contract type: R - COST PLUS AWARD FEE
Inspection: DESTINATION
Acceptance: DESTINATION
FOB: DESTINATION
Descriptive Data:
Estimated Cost $_____
Award Fee Pool $_____
Mission Success Fee Pool $_____
Base Fee $_____
CLIN Price $_____
All Research, Development, Test, and Evaluation (RDT&E) for design, fielding, and testing of the NPOESS system, including CrIS and VIIRS sensors to NPP, the complete space segment, IDP segment, C3 segment, launch support segment, and field terminal segment, resulting in declaration of Initial Operational Capability (IOC)...

010001

Noun: FY20__ DOD FUNDS

010002

Noun: FY20__ DOC FUNDS

010003

Noun: FY20__ DOD FUNDS

010004

Noun: FY20__ DOC FUNDS

ITEM	SUPPLIES OR SERVICES	Qty Purch Unit	Unit Price Total Item Amount
0200		1 LOT	

Noun: INTERIM CONTRACTOR SUPPORT
ACRN: 9
Security: U
NSN: N - Not Applicable
Contract type: L - FIXED PRICE INCENTIVE FIRM
Inspection: DESTINATION
Acceptance: DESTINATION
FOB: DESTINATION
Descriptive Data:
Interim Contractor Support from NPP Ground Readiness through declaration of IOC. Operating and maintaining C3 sites and systems, IDP sites and systems, processing data, maintaining and updating algorithms, &c., &c...

020001

Noun: FY20__ DOD FUNDING

020002

Noun: FY20__ DOC FUNDING

020003

Noun: FY20__ DOD FUNDING

020004

Noun: FY20__ DOC FUNDING

ITEM	SUPPLIES OR SERVICES	Qty Purch Unit	Unit Price Total Item Amount

1300 OPTION CLIN

Noun: REPLENISHMENT SATELLITE (C3)
Security: U
NSN: N - Not Applicable
Descriptive Data:
Production of the C3 satellite, including IA&T...

1400 OPTION CLIN

Noun: REPLENISHMENT SATELLITE (C4)
Security: U
NSN: N - Not Applicable
Descriptive Data:
Production of the C4 satellite, including IA&T...

1500 OPTION CLIN

Noun: REPLENISHMENT SATELLITE (C5)
Security: U
NSN: N - Not Applicable
Descriptive Data:
Production of the C5 satellite, including IA&T...

1600 OPTION CLIN

Noun: REPLENISHMENT SATELLITE (C6)
Security: U
NSN: N - Not Applicable
Descriptive Data:
Production of the C6 satellite, including IA&T...

Note: the warehousing, maintenance, servicing, and and launch support of the production satellites will be bought on the future O&S contract, not on the current EMD/Production contract.

plus – we need a CLIN for special services (services and studies within the general scope of the contract but not specifically bought and paid for in the CLINs above, the need for which might arise as time passes)

we will add words saying that the RFP CLIN structure for the production satellites represents the government reference architecture, and that an offeror with a different architecture may modify the CLIN structure to fit its approach...

we will also add words saying that if an offeror wishes to propose advance procurement funding for the production options, it may do so subject to 20% and two years, and we will provide such other instructions as are appropriate...

ITEM	SUPPLIES OR SERVICES	Qty Purch Unit	Unit Price Total Item Amount

2100 OPTION CLIN

Noun:	OPERATORS MANUALS, TRAINING MATERIALS
Security:	U
NSN:	N - Not Applicable

Descriptive Data:

Operators Manuals, Training Manuals, and other materials necessary to transition from Interim Contractor Support (ICS) to Government operations or for competitive use. Option may be exercised on or before 1 Feb 2008 with delivery at 1 Feb 2010 with updates as necessary through declaration of IOC

NOTICE: The following contract clauses pertinent to this section are hereby incorporated in full text:

A. OTHER CONTRACT CLAUSES IN FULL TEXT

H001 OPTIONS (MAY 1997)

The Government reserves the right to exercise the following option(s) subject to the stated conditions. In the event an option is exercised, the affected sections of the contract, e.g., Section B, Section F, Section G, etc., will be modified as appropriate.

H002 PRODUCTION PROGRESS REPORT (MAY 1997)

In accordance with FAR clause 52.242-2, "Production Progress Reports," as set forth in Section I, the Contractor shall prepare and submit to the Contracting Officer production progress reports as follows:

Frequency/Timing: _____ (insert frequency and timing for submission of progress reports)
Applicable to CLINs: _____ (insert line items)
Offices for Distribution: _____ (insert offices for distribution)

The Contractor shall comply with DFARS 242.1107 for reporting actual or potential delinquencies.

H025 INCORPORATION OF SECTION K (OCT 1998)

Section K of the solicitation is hereby incorporated by reference.

H029 IMPLEMENTATION OF DISCLOSURE OF INFORMATION (OCT 1997)

In order to comply with DFARS 252.204-7000, Disclosure of Information, the following copies of the information to be released are required at least 45 days prior to the scheduled release date:

(a) _____ copy(ies) (insert number of copies) to: Office of Public Affairs, _____ (address)

(b) _____ copy(ies) (insert number of copies) to: Contracting Officer, _____ (address)

(c) _____ copy(ies) (insert number of copies) to: Program Manager, _____ (address).

H033 SOLICITATION NUMBER (APR 1998)

Solicitation Number: _____ (insert solicitation number)

B. OTHER CONTRACT CLAUSES IN FULL TEXT

H-XXX NPP INTERFACE

(a) The NPP Project Office will deliver _____ and provide _____ support to the contractor...

(b) The NPOESS EMD contractor will deliver _____ and provide _____ to the NPP contractor...

(c) Instrument interfaces and characteristics for the VIIRS and CrIS instruments which will be delivered to NPP will be controlled...

H-XXX TOTAL SYSTEM PERFORMANCE RESPONSIBILITY

(a) Definitions. The NPOESS is comprised of the Space Segment, Launch Support Services Segment, Command, Control and Communications (C3) Segment, Integrated Data Processing Segment and the Field Terminal Segment. The NPOESS segments are defined in the Technical Requirements Document (Section J). The Space Segment includes design, manufacture, and delivery of CrIS and VIIRS sensors to NPP (and support of sensor integration onto the NPP spacecraft and on-orbit checkout).

(b) Performance Responsibility. The NPOESS Contractor shall have Total System Performance Responsibility (TSPR) for the entire National Polar-orbiting Operational Environmental Satellite as defined above. TSPR is the responsibility for ensuring that the overall performance of NPOESS meets all requirements defined in the Contract Schedule, Section J, NPOESS Technical Requirements Document and Attachment __, and the Integrated Master Plan. TSPR includes integration of all segments, systems, subsystems, and components whether furnished by the Government, identified and directed by the Government, managed by the Government or its designated agent, or commercially acquired. Additionally, the NPOESS contractor is responsible for ensuring that the NPOESS is optimized for post-EMD production, deployment and support. Integration responsibility shall include the monitoring of all associate contractor and government systems and infrastructure activities. Monitoring shall include the timely notification and recommendation of mitigation efforts to the Government for risks resulting from schedule, technical, or resource conflicts with these systems and infrastructure activities to ensure the Contract Schedule, Attachment __, NPOESS Statement of Work Attachment ___, NPOESS System Specification, Attachment ___, and attachment ___, Integrated Master Plan requirements are met.

(c) Equitable Adjustments. Failure of any systems or infrastructure requiring interface with the NPOESS to meet stated capabilities does not relieve the contractor of TSPR, as the contractor shall avoid or mitigate any impacts to the NPOESS to the maximum extent practicable. However, the parties agree that equitable adjustments will be made to the cost, schedule, NPOESS contract system specification, award fee criteria and other affected requirements of the NPOESS contract for NPOESS impacts resulting from changes to any systems or infrastructures requiring interface with NPOESS capabilities. All equitable adjustments to the NPOESS contract for the above changes shall be processed pursuant to the procedures of the "Changes" clause of the NPOESS contract. For government-furnished items, the provisions of FAR 52.245-5, "Government Property" shall apply.

H-XXX CHANGES TO CERTAIN SENSOR PERFORMANCE PARAMETERS

(a) The Government has specific interests in certain sensor performance parameters that define instrument performance, below the EDR performance level, that are important to some data users for diverse purposes, such as direct assimilation of raw radiances into numerical models. In particular, the Government is interested in any change to the components in the end-to-end signal flow path which could affect the quality of the sensor output raw data stream. These changes, if any are made, remain the full responsibility of the contractor, but the contractor shall provide notification of any such proposed changes, with supporting rationale, by written notice to the NPOESS IPO Chief Systems Engineer and with direct reference to this clause, in sufficient time to meaningfully support the Government's participation in the discussion of the change and as soon as practicable after the need for the change surfaces. The Government's participation in these discussions is at its discretion, and may involve participation from the Government's technical, scientific, user, and contractor support communities.

(b) Examples of the parameters of interest to the Government are Instrument Type, Spectral or Frequency Band Characteristics, IFOV / IFOR Parameters, NE?T, NEN, SNR, Measurement Accuracy & Error Sources, Scan and Sampling Parameters, Band to Band or Channel to Channel Co-Registration, Optical System Design Parameters/Constraints, Focal Plane Architecture and Detector Characteristics, Radiant Cooler Performance Characteristics, Antenna Characteristics, Modulation Transfer Function, Calibration Concepts - Pre-Flight & On-Orbit, and Data Acquisition Parameters & Data Stream Content.

H-XXX IPT RELATIONSHIPS

(a) The contractor will invite the IPO to assign Government officials (or supporting FFRDC employees) on the contractor's Integrated Product Teams (IPTs). The IPO may or may not make such assignments.

(b) Where these assignments are made, they are for the purpose of providing visibility into the contractor's performance and progress and insight to the contractor from the Government. Government officials (or supporting FFRDC employees) do not chair IPTs, and the presence and participation of Government officials on an IPT does not indicate Government acceptance or concurrence or any matter presented to the IPT. Government participation does not in any way relieve the contractor of responsibility for total system performance under this contract.

(c) The Contracting Officer shall be the only individual authorized to redirect the effort or in any way modify any terms of this contract. The contractor shall not rely on any direction or instruction from any other Government team member that is contrary to the contract or that increases or decreases the scope or estimated cost of the contract. Insight and information provided to the contractor by other members of the Government team is provided for the contractor's benefit and use as it sees fit to accomplish its total system performance responsibilities under this contract.

H-XXX AWARD FEE AND MISSION SUCCESS FEE

An Award Fee and a Mission Success Fee will be utilized in this contract. Refer to the attached Award Fee Plan for details.

H-XXX COST MITIGATION INCENTIVE

(a) The Government desires insight into the pricing of the production options, including risk assumptions made by the contractor. The Government also desires the contractor's best efforts at controlling risk, taking advantage of cost savings and learning that occurs between award of the contract and exercise of the options, and so forth.

(b) Eighteen months before the date set for exercise of an option for a replenishment satellite, the contractor may, at its discretion, propose a new and lower target cost and price for the option.

(c) In such a case, the contractor will provide rationale for the price change, including updated assumptions, changed circumstances, and so forth, all with reference to the original cost proposal established at time of contract award.

(d) If the Government considers the new lower price reasonable, it may modify the contract to reflect the new target cost and price. Changing the target cost shall not result in a change to the target profit, the award fee, or the mission success fee. In such a case, and if the option is subsequently exercised, the Government shall pay to the contractor an amount equal to one-half of the difference between the target cost before this negotiation and the target cost after this negotiation. This is illustrated in the table below in a notion example where the target cost changes from $100 to $90—

	AT AWARD OF CONTRACT	AT EXERCISE OF OPTION	AT COMPLETION OF PERFORMANCE
Target Cost	$100	$90	*
Target Profit	$10	$10	*
Target Price	$110	$100	*
Award Fee	$5	$5	*
Mission Success Fee	$5	$5	*
Cost Mitigation Incentive		$5	*
TOTAL PROFIT/FEE	$20	$25	*
TOTAL COST TO GOV'T	$120	$115	*

*The actual cost will be determined at the end of performance, and the actual profit will be a mathematical calculation in accordance with the FPIF clause of the contract. The actual Award Fee and Mission Success Fee earned will be in accordance with the Award Fee and Mission Success Fee Plan.

H-XXX BASE FEE

The base fee will be apportioned... The contractor may invoice for base fee...

H-XXX FEE RISK (ON-ORBIT PERFORMANCE INCENTIVE)

(a) The FPI incentive, award fee, and mission success fee earned by the contractor for each development and production satellite is earned at risk.

(b) The risk on this fee is removed only by successful performance of the production satellite. Up to 30% of the risk may be removed by successful on-orbit checkout, up to 30% of the risk may be removed by successfully reaching the end of the infant mortality period, and up to 40% of the risk may be removed by successfully reaching the end of operational years two, three, four, and five, as shown in Figure 1.

Figure 1 - Fee Risk Removal

	PERIOD 0 On-Orbit Checkout	PERIOD 1 Infant Mortality	PERIOD 2 Operational Year 2	PERIOD 3 Operational Year 3	PERIOD 4 Operational Year 4	PERIOD 5 Operational Year 5	TOTAL
Fee Risk Removal Potential	up to 30%	up to 30%	up to 10%	up to 10%	up to 10%	up to 10%	up to 100%

(c) At the end of each period, the FDO will subjectively determine the degree of success using a percentage figure where 0% represents completely unsuccessful and 100% represents completely successful. The contractor's risk on the fee is removed by a factor equal to the maximum figure shown for that period in Figure 1; for example, a 100% degree of success at the end of Period 0 represents a 30% fee risk removal (100 x 30% = 30), a 90% degree of success at the end of Period 1 represents 27% fee risk removal (90 x 30% = 27), a 80% degree of success at the end of Period 2 represents 8% fee risk removal (80 x 10% = 8), and so forth.

(d) If at the end of any period the degree of success is zero, the contractor will return any at-risk fee to the Government.

(e) Except for Period 0, the contractor bears sole risk for successful performance. Neither acts of God or the public enemy, or any other circumstances such as those listed in the Excusable Delays clause, shall serve as a mitigation or excuse for unsuccessful performance for the purpose of computing fee risk removal. For Period 0, the sole excuse shall be a fault which is totally and unquestionably the sole fault of the launch vehicle. In such a case where the satellite is totally lost at launch or immediately thereafter, due to no fault of the contractor, the fee risk removed shall be 50% and the other 50% shall be returned to the Government.

(f) If at the end of Period 5 for any production satellite there is still fee at-risk, the FDO shall provide a schedule allowing the fee at-risk to reduce to zero over some period of time. In such a case, the reduction factor shall continue at 5% per year, and the actual fee risk reduction shall be the degree of success determined by the FDO times the reduction factor.

H-XXX EARNED VALUE MANAGEMENT SYSTEM (EVMS)

The contractor will provide routine reporting at level 3 of the WBS and exception reporting at level 5 of the WBS.

H-XXX SPECIAL STUDIES

The Government may require the Contractor to accomplish certain special study efforts during the period of the contract.

H-XXX ENABLING CLAUSE(S) FOR FFRDCs AND OTHER IPO CONTRACTORS

This contract covers part of the NPOESS program which is under the general program management of the tri-agency Integrated Program Office. The Government has entered into contract with the Aerospace Corporation and the Mitre Corporation (Federally Funded Research and Development Centers (FFRDCs)) and other support contractors for services of technical groups which will support the NPOESS program office by performing various SETA services.

H-XXX KEY PERSONNEL

(a) The contractor agrees that that at least three-fourths of the key personnel identified in its proposal will remain on the program full-time for the first year after date of award. This failing, the Government may decrease the Award Fee pool for the development effort by up to $4,000,000.

(b) The contractor further agrees that that at least one-half of the key personnel identified in its proposal will remain on the program full-time for two years after date of award. This failing, the Government may decrease the Award Fee pool for the development effort by up to $2,000,000.

H-XXX EXERCISE OF OPTIONS AS SEPARATE CONTRACTS

The Government reserves the right to exercise any option as a separate contract at the time of exercise. In such case, the appropriate terms and conditions of this contract will be included in the new contract.

H-XXX CONTRACT INCENTIVIZATION

This contract includes multiple incentive arrangements: a base fee during the EMD effort, an Award Fee during both EMD and production efforts, a Mission Success Fee during both EMD and production efforts, a cost incentive for the production effort as part of the FPIF arrangement, a cost mitigation incentive for the production effort, and an on-orbit fee risk removal incentive for all satellites.

H-XXX DATA DENIAL

The contractor shall stop transmitting _____ data from the satellites upon order of data denial by the Program Director or the NPOESS Associate Director for Operations...

H-XXX INTEGRATED MASTER PLAN AND INTEGRATED MASTER SCHEDULE

(a) General Description. The IMP and IMS are documents which provide insight into the process and related schedules associated with accomplishing the design, development, fabrication, testing and delivery and support of the NPOESS. The primary consideration in the application of the IMP and IMS is to field a NPOESS that meets the contract specifications.

(b) Definition of Terms. The IMP is divided into three categories: Events, Significant Accomplishments, and Accomplishment Criteria, as defined below. The IMS consists of the Detail Tasks and Calendar Schedule relating to the IMP, as follows--

(1) Event (IMP) - The conclusion/initiation of an interval of major program activity

(2) Significant Accomplishment (IMP) - Desired result at a specified event which indicates a level of design maturity (or progress) directly related to each product/process.

(3) Accomplishment Criteria (IMP) - A definitive measure/indicator that the level of maturity (or progress) has been achieved.

(4) Detailed Tasks (IMS) - Detailed work effort to be completed in support of a specific significant accomplishment

(5) Calendar Schedule (IMS) - Detailed schedule (dates) or the work effort to be completed

(c) Flow Down IMP and IMS. The contractor shall flow down the requirements for preparation of an IMP and IMS to the major/critical subcontractors and vendors.

(d) Changes to the IMP. The IMP is Attachment __ to the contract. Changes to the IMP can only be made by contract modification.

H-XXX CRYPTOGRAPHIC EQUIPMENT

The contractor will acquire Flight Vehicle and Ground System Cryptographic Equipment from _____ (IPO insert source).

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L&M-501 — COMBINED SECTIONS L AND M

This is a combined Sections L and M. The rationale for the combining is to provide a clear linkage between the required proposal information and the way the Government plans to evaluate the proposal. The section focuses on the key program objectives contained in the executive summary and the Statement of Objectives (SOO). The entire thrust of the proposal instructions and the evaluation criteria is to understand the offerors approach to meet the program objectives, support the acquisition strategy and mitigate the existing risks.

L&M-502 — SOURCE SELECTION STRUCTURE

Responses to this RFP will consist of three components.

First, each offeror shall provide a proposal limited to 250 pages (plus cost information) that communicates the offeror's system performance baseline and describes the features of the offeror's design, development, system engineering and management approach and the benefits the offeror's approach provides to the Government. As part of the proposal, offerors are allowed to provide a reference CD-ROM of previously submitted data to substantiate the proposal submission. Previously submitted data is not included in the 250-page count limitation. It will be used to substantiate the proposal and may be evaluated.

Second, each offeror shall substantiate its system performance, designs, and technical and management approaches during a ten working day Program Risk Mitigation Oral Presentation. This presentation includes the material required to be delivered during the NPOESS Program Definition and Risk Reduction Preliminary Design Review plus additional system engineering and integration, program plan, management and organization and cost substantiating information. Ground Demonstration Four will be conducted during this review and will be evaluated. Copies of briefing charts to be used during the Program Risk Mitigation Oral Presentation shall be submitted with the proposal and will not be updated prior to presenting the information. There are no page limitations on the Program Risk Mitigation Oral Presentation. Presentation dates are to be determined. Accordingly, each offeror who intends to submit a proposal must notify the contracting officer 60 days before the proposal submission date of its intention to submit a proposal. Based on the responses received, the contracting officer will, by lot, select the ten-day period for each offeror's Program Risk Oral Presentation. Notification of the results will be provided to offerors no fewer than 45 days before the proposal submission date. Each offeror must be prepared to provide its Program Risk Oral Presentation at its own location and facilities at the time selected by the Government as described above during the period _____ through _____. The offerors will be provided Evaluation Notices (EN) after the Program Mitigation Risk Oral Presentation. They will have one week to review the ENs and then be provided an opportunity to have discussions with the program office. The discussions shall be for clarification of the ENs. The offeror will also be provided the program office's assessment of its proposal and Program Risk Mitigation presentation during the discussions. After the discussions the offerors shall provide written responses to the ENs within 30 days.

Third, each offeror shall provide a 90 minute duration Final Clarification Video Presentation that addresses each open issue identified following the Government's evaluation of the proposal and the Program Risk Mitigation Oral Presentation and any other topics that the offeror may chose to address. Each of these elements will be organized and evaluated as described in this combined section L&M; i.e., the proposal, the Program Risk Mitigation Oral Presentation and the Final Clarification Video Presentation will share a common organization and each will be evaluated using the same criteria.

L&M-505 — BASIS FOR CONTRACT AWARD

(a) The Government will conduct this competitive negotiated acquisition in accordance with FAR Subpart 15.3, Source Selection, and the Defense and Air Force supplements thereto (especially AFFARS Subpart 5315.3, updated by Air Force Acquisition Circular 96-2, 4 Jun 1999). A trade-off process, as described in FAR 15.101-1, will be used in making the source selection decision. This decision will reflect the Source Selection Authority (SSA)'s integrated assessment of the merits of the offers submitted. Offerors must recognize that the subjective judgment of Government evaluators is implicit in the evaluation process. The Government contemplates awarding one contract resulting from this solicitation, but reserves the right to make more or no awards. Obtaining best value is the Government's intention. The Government reserves the right to award to a higher price offeror if this provides the best value.

(b) Price will be a part of the SSA's integrated assessment and decision. All evaluation factors other than price, when combined, are significantly more important than price. Offerors are encouraged to exceed minimum technical, performance, reliability and other stipulated Government requirements wherever feasible, provided a balanced approach is considered with respect to program schedule, risk, cost, and the integrated requirements prioritization list

(c)The four evaluation factors are discussed in Paragraph 2, Evaluation Criteria. In addition to these, the SSA's integrated assessment and decision will include an evaluation of general considerations. These are—

(1) Adherence to Terms and Conditions (an evaluation of the offeror's proposed terms and conditions to ascertain business prudence and compliance with the terms and conditions intended within the solicitation);
(2) Overall soundness of the offeror's proposed approach;
(3) Subcontracting Plan (an evaluation of the offeror's Small, Small Disadvantaged, and Women-Owned Business Subcontracting Plan to ascertain whether the plan addresses the minimum goals for participation in the resulting contract by small businesses, small disadvantaged businesses, women-owned businesses, and Historically Black Colleges and Universities and Minority Institutions);
(4) Mentor-Protégé Agreements; and
(5) Proposed incentives, commitments, and warranties offered by the offerer for the Government's benefit during the life of the contract.

(d)Proposal information provided for one factor may be used to assess other factors if the Government deems it appropriate. However, the Government is not required to use information provided for one factor to assess other factors, unless the Offeror makes specific references from one volume or section to the next. The government may user other Past Performance data that was not provided by the Offeror in its evaluation. A deficiency in one area of a proposal may result in the entire proposal being found to be unacceptable. Past performance problems not addressed by the Offeror will be considered to be still in existence..

(e)The Government, at its election, may conduct on-site inspections of the Offerors' facilities for purposes of verifying proposal information. The inspection, if done, will be used in the evaluation.

L&M-507 — EVALUATION CRITERIA

(a) The Government will evaluate proposals, the Program Risk Mitigation Oral Presentation, and the Final Clarification Video Presentation against the factors and subfactors as depicted in Table L&M-xxx (Evaluation Matrix). Aspects under each subfactor will not be separately evaluated. Factors 1, 2, and 3, when combined, are significantly more important than factor 4. However, cost will be a significant consideration in the selection decision (see FAR 15.304(e))

Table L&M-xxx — Evaluation Matrix

			Mission Capability and Proposal Risk Subfactors*				
			1. System Performance	2. System Design	3. Systems Integration and Test (SEIT)	4. Planning	5. Management and Organizxation
Factors	(most important factors, equal to each other)	1. Mission Capability	**B** **G** **Y** **R**	**B** **G** **Y** **R**	**B** **G** **Y** **R**	**B** **G** **Y** **R**	**B** **G** **Y** **R**
		2. Past Performance	High Confidence Significant Confidence Confidence Little Confidence No Confidence Unknown Confidence				
	(less important than 1 or 2)	3. Proposal Risk	**H** **M-H** **M** **L-M** **L**	**H** **M-H** **M** **L-M** **L**	**H** **M-H** **M** **L-M** **L**	**H** **M-H** **M** **L-M** **L**	**H** **M-H** **M** **L-M** **L**
	(less important than 3)	4. Cost**	$_____ proposed cost		$_____ most probable cost		
			$_____ proposed life-cycle cost		$_____ most probable life-cycle cost		

*Of the five mission capability subfactors, numbers 1, 2,and 5 are most important and are equal to each other. Subfactors 3 and 4 are of lesser importance, and are equal to each other.
** Proposed cost means the proposed EMD and Production contract costs; proposed life cycle cost includes the contract cost and ten years of support proposed costs.

L&M-512 — GENERAL INSTRUCTIONS

1.0 General Instructions

1.1 General Guidance. The paragraphs below contain the instructions for preparing and submitting a proposal in response to the NPOESS Engineering and Manufacturing Development and Production phases Request For Proposal (RFP). The offeror shall provide a single proposal that is fully integrated across all functional areas and is responsive to the NPOESS SOO, the TRD, this Section L, and all other aspects of the solicitation. Requested information may be satisfied by range of substantiating data from design philosophy, analysis, laboratory and other data. However, any information submitted shall have a clear explanation as to where it came from and how it was derived. The offeror's proposal must contain all the pertinent information in sufficient detail to permit evaluation of the proposed program.

1.2 Content. The offeror's proposal must clearly and convincingly demonstrate that the Offeror: has a through understanding of the solicitation and associated risks; has valid and practical solutions for all requirements; and has processes or can obtain access to required resources to fulfill all the requirements. Unsubstantiated statements that the Offeror understands, or can or will comply with the requirements, and statements that only paraphrase the requirements or parts thereof are inadequate. The Offeror is advised that the quality of information is more important than the quantity. Clarity, brevity, and logical organization should be emphasized during the proposal preparation. It is the responsibility of the Offeror to present enough information to allow evaluation without discussions. The Offeror must include any data necessary to substantiate his system performance baseline and illustrate the adequacy of the various assumptions, design approaches, and solutions to problems. There is no need to repeat information in more than one section if an overlap exists; the detailed information should be included in the most logical place and summarized or referenced in the other areas. Unnecessarily elaborate proposals are neither necessary nor desired. The offeror shall submit an offer and other written proposal information in accordance with instructions within this Section.

1.3 Contractor Investment. The government will not accept any proposal offeror investment in the NPOESS EMD and Production phase, nor will any proposed investments be used in the evaluation.

1.4 Alternate Proposals. Alternate proposals are not permitted in response to the solicitation.

1.5 Classified Proposals. The Government anticipates that proposals will **not** include classified information. The PCO's approval is required prior to the offeror's submission of classified information. If it is necessary to include classified information, the classified portions of the affected proposal volumes shall be submitted under a separate cover (hardcopy only) in accordance with DoD 5220.22-M National Industrial Security Program Operating Manual (NISPOM) and PCO instructions. Classified pages shall count against the total page limitation (if any) for the affected volume.

1.6 World Wide Web Access. The RFP documents and any amendments thereto and general program information is available through the NPOESS Electronic Library at the following World Wide Web address: http://npoesslib.ipo.noaa.gov/EMD.htm

1.7 Reference Library. A reference library is available to offerors at the NPOESS Integrated Program Office, Suite 1450, 8455 Colesville Rd., Silver Spring, MD, 20910. The library point of contact is Ms. Jane Jacob, (301) 415-0400, ext 120 and is available Monday through Friday, 0800 to 1600 EST, except federal holidays. A list of library contents and many of the listed documents also are available through the NPOESS Electronic Library at the following Internet address: http://npoesslib.ipo.noaa.gov

L&M-513 — USE OF CONTRACTOR SUPPORT SERVICES

(a) Prospective Offerors are hereby notified that the Government intends to use the following contractors to support the process of evaluating proposals received in response to the solicitation—

bd Systems, Inc.	Systems Engineering & Technical Advice (SETA)
Mitretek Systems	Systems Engineering & Technical Advice
User Technology Associates	Systems Engineering & Technical Advice
Veridian Systems	Systems Engineering & Technical Advice
Tecolote Research, Inc.	Specialized Cost Analysis Support (SCAS)
The Aerospace Corporation	Federally Funded Research/ Development Center (FFRDC)
MIT/Lincoln Laboratory	Federally Funded Research/ Development Center
The MITRE Corporation	Federally Funded Research/ Development Center
IAI	Systems Engineering & Technical Advice (SETA)

(b) Contractor personnel and firms used to support the evaluation process sign non-disclosure statements with the Government. Submission of a proposal will be deemed to be the Offeror's consent for the Government to use the aforementioned contractor personnel to support the proposal evaluation process.

L&M-515 — PROPOSAL FORMAT

(a) **Proposal Organization and Page Limits**. The Offeror shall submit its proposal in hard copy and electronic format delivered on CD-ROM. Proposals are constrained to 250 pages not including cost data. Cover pages, table of contents, listing of figures, and indices may be used and will not be included in the page count. Annexes, appendices, and attachments to the proposal will be included in the page count unless the RFP specifically excludes them elsewhere. Any pages in excess of the limit will be deleted from the end of the proposal and will not be read or evaluated. A transmittal letter may be used to forward the proposals to the Contracting Officer and will not count against the page count. The letter will be used administratively and will not be read by the evaluators or the Source Selection Authority (SSA). Unless otherwise specified, the Offeror may use any presentation form such as narrative, graphics, photographs, pictures, tables, graphs, and block diagrams to provide a concise description of the information to be conveyed. Footnotes to the text are allowed and may be used in the tables and figures. Whenever a plan, parametric data, or certification is required as part of a Volume, that plan, parametric data, or certification may be attached to the specific Volume as an appendix. The Offeror may submit one CD-ROM containing previously submitted data. Previously submitted data includes any document, report, study, drawing, memoranda or other item produced during the NPOESS Program Definition and Risk Reduction program that was delivered to the IPO on or before January 1, 2002. Offerors are allowed to hyperlink from the proposal to a relevant section of a file contained in the previously submitted data CD-ROM. The offeror shall not hyperlink to a general area of a file or to the first page (cover page) of a file but rather to the specific information substantiating a specific claim made in the proposal. The files contained on the previously submitted data CD-ROM are not included in the page count. The offeror shall submit charts to be used during the Program Risk Mitigation Oral Presentation. These charts shall not be updated prior to presenting the information. There are no page limitations on the Program Risk Mitigation Oral Presentation charts or the Previously Submitted Data. The hard copy proposal submission should be divided into six volumes as follows: (Hard copy of the previous data shall not be submitted.)

1. Executive Summary
2. Mission Capability
Past and Present Performance Data
4. Cost
5. Model Contract
6. Program Risk Mitigation Oral Presentation

(b) **Quantities/Numbering of Copies.** The offeror shall submit two electronic media copies (original and one backup) of its proposal on 5 inch CD-ROMs. Each CD-ROM shall be properly labeled with disk name, file name(s), brief description, and a cross-reference to the paper copy. The offeror shall provide an original and five paper copies (each identified by Copy Number) of its proposal including the specification document (except the model contract section of the proposal, which only one original and one copy shall be required). Ten copies of the Mission Capability Subfactor proposal shall be submitted. Submissions need not be in color. Copy Number 1 of the paper copies shall contain all required original signatures (the cover page of the proposed contract, the proposed model contract, Representations and Certifications (Section K), and GFP Written Authorization). The “Additional Documentation as Appendices to Volume V” shall be submitted with the proposal. Any extra paper copies of proposals submitted will be destroyed. The electronic copies, and all 6 hard copies are to be delivered to the IPO source selection facility address shown in the SF 33 (Section A, Block 8).

(c) **Transmittal Letter.** Include a hard copy transmittal letter with the proposal. The letter shall include a statement that the proposal will remain valid for no less than 120 calendar days from the date the proposal is due. This letter is not to exceed two pages; it will be used administratively and will not be evaluated. The transmittal letter shall also affirm the electronic media by which the offer is transmitted to the Government does not contain a “virus”, a self-replicating program that has the ability to destroy data or deny services, and that the media has been checked and cleaned in its entirety with anti-virus software. The offeror shall reference the anti-virus program name and version number.

(d) **Submission of Hard Copy Proposals.** This section provides general guidance for preparing hard copy proposals as well as specific instructions on the format and content of the proposal. The offeror’s proposal must include all data and information requested by the solicitation and must be submitted in

accordance with these instructions. The offeror shall be compliant with the requirements as stated in the Statement of Objectives (SOO), Contract Data Requirements List (CDRL), Model Contract, etc. Non-conformance with these instructions may result in an unfavorable proposal evaluation.

(e) **Binding and Labeling.** Each volume of the paper copy proposal should be separately bound in a three-ring loose leaf binder that shall permit the volume to lie flat when open. Staples shall not be used. A cover sheet should be bound in each book, clearly marked as to volume number, title, copy number, RFP identification and the offeror's name. The same identifying data shall be placed on the spine of each binder. Tab indexing shall be used to identify sections. All unclassified document binders shall have a color other than red or other applicable security designation colors. Be sure to identify appropriate markings such as the legend at FAR provision 52.215-1(e), Restriction on Disclosure and Use of Data. Volume II, Mission Capability Factor, shall have each subfactor presented within a separate binder.

(f) **Page Format Restrictions and Limitations.** Page size shall be 8.5 x 11 inches, not including foldouts. Except for the reproduced sections of the solicitation document, text font shall be Times New Roman or equivalent, 12 point vertical character height, black (except hypertext links), and single spaced. Kern modification or other techniques to reduce character size or spacing are prohibited. All text within illustrations and tables shall be Arial, legible, and at least 8 point in height. Figure titles shall be at least 10 points in height. These restrictions do not apply to the viewgraphs provided in the Executive Summary, Oral Presentation, or the forms provided by the Government in this RFP to be included in the NPOESS contract (Standard Form 33, DD Form 254, DD Form 1423-1 and DD Form 1664). No pen and ink changes are allowed. Landscape orientation is acceptable. The page count limitation is based on the 8.5 x 11 inch paper copy with ¾ inch margins on all sides and page set up at 100%. All information except for documentation number, classification markings, and page numbers must be contained within the margins. Pages shall be numbered sequentially and consecutively (i.e., 1-1, 1-2, IV-1, IV-2).

(g) **Foldouts.** Legible tables, charts, graphs and figures shall be used wherever practical to depict organizations, systems and layout, implementation schedules, plans, etc. These displays shall be uncomplicated, legible and shall not exceed 11 x 17 inches in size. Foldout pages shall fold entirely within the volume and counts as two pages toward the page limitations. Foldout pages may only be used for large tables, charts, graphs, diagrams and schematics, not for pages of text. All information (except for document numbers, classification markings, and page numbers) must be contained within an image area of 9 ½ x 15 ½ inches.

(h) **Cross Referencing.** The Government will permit offerors to include a reasonable number of selected cross-references [via hypertext links] to an electronic copy of the offerors' Program Risk Mitigation Oral Presentation (PRMOP) and relevant engineering memoranda submitted to the Government (NPOESS IPO) prior to 1 February 2002. The PRMOP cross-references may be evaluated as a part of the proposal. The ten day actual PRMOP will be evaluated. Offerors are encouraged to use cross-referencing to reduce the potential for redundancy between proposal Volume II and the System/Segment Specifications. Use of electronic cross-references also may facilitate each offeror's demonstration that its Volume II performance claims are documented in its System/Segment Specifications. All referenced material must be included in the electronic proposal to enable the hypertext links. Offerors shall not submit paper copies of reference documents previously submitted to the Government. Offerors shall provide a list of all cross-referenced material. Offerors also are advised that the Government will assume that any information required by this solicitation that is not submitted in its designated proposal volume has been omitted from the proposal deliberately.

(i) **Cross Reference Matrix.** Cross-referencing within a proposal volume is permitted where its use would conserve space without impairing clarity. The Offeror shall complete a Cross Reference Matrix in accordance with provision L&M-5xx, and shall include the Cross Reference Matrix as a separate file.

L&M-517 — ELECTRONIC SUBMISSION OF PROPOSAL

(a) **General.** Proposals will be read and evaluated electronically. To enable the Government to successfully view the proposals electronically, the offeror shall submit the proposal files in the Adobe Portable Document Format 4.0 (PDF), Microsoft Word 97 SR-2 (DOC), Microsoft Excel 5.0 or later (XL*), or Microsoft PowerPoint 97 SR-2 (PPT), including any referenced PRMOP data and/or engineering memoranda previously submitted to the Government. Adobe Acrobat will be used to view PDF files. The offeror shall generate "Thumbnails" within each PDF file. The offeror has the option of generating "bookmarks" with each PDF file as well. The offeror shall provide hypertext links in a table of contents linked to each file provided in the proposal. Use of hypertext links within the proposal is permitted. The use of bookmarks or hypertext links will not influence the evaluation. The offeror may only add hypertext links to information previously submitted as PRMOP data, relevant engineering memorandum, or to information submitted as a part of the proposal. Information hyperlinked to documents outside the proposal will not be evaluated. However, there shall be no links from any other volume into the cost volume. The Integrated Master Schedule and other network schedules will be developed using software compatible with Microsoft Project 98. The proposal shall be formatted using the HP LaserJet 4000 printer driver to ensure pages in the hard copy match the electronic copy. The offeror shall not embed sound or video (e.g., MPEG) files into the proposal files, except in the oral presentations. Use of sound or video files within the oral presentations is acceptable. In addition the offeror's proposal shall conform to the following:

a) Limit colors to 256 colors at 1024x768 resolution; avoid color gradients.
b) Keep embedded graphics as simple as possible; large graphics files are discouraged.
c) Minimize the use of scanned images.
d) Use of zipped or self-extracting archive files (e.g. .zip or .exe files) is allowed.

(b) **Operating System.** The proposals will be accessed in a client-server environment using Microsoft Windows NT Advanced Server.

(c) To ensure offeror proposals are compatible with the Government's hardware configuration, offerors may submit a test CD-ROM containing sample files to the IPO SSF address in the SF 33, Section A, Block 8, one week prior to the due date for past performance information. The Government will test the CD-ROM to determine whether the files are readable and the hypertext links properly connect the linked documents. This test is offered for the offerors' benefit. The offerors remain solely responsible for ensuring their proposals can be accessed as required in the source selection evaluation environment.

(d) Each CD-ROM shall include proposal files as indicated below. Each directory shall contain a cover page and a table of contents for that directory. Additionally, the offeror shall provide a glossary of all acronyms used, with an explanation of each and a list of technical reference material, if applicable, in File Directory 1 (DIR_1).

(1) **Root Directory.** Provide three files in the root directory of the CD-ROM. The first is a PDF file (TBLCONT.PDF) that serves as a table of contents for the entire proposal. The offeror shall hypertext link the table of contents reference to the appropriate file on the CD-ROM. The second file (PROPINFO.PDF) shall contain information to assist the Government evaluators in navigating through the proposal files. The third file is a "tab-delimited ASCII file" (KTRINFO.TXT) containing the information as shown in the table below entitled "Root Directory Contents" in exact order with a tab between each entry.

FILE NAMES	ROOT DIRECTORY CONTENTS		SECTION L&M REF
TBLCONT.PDF	Table of Contents for Entire Proposal		1.9.4.1
PROPINFO.PDF	Proposal Information		1.9.4.1
KTRINFO.TXT	Offeror Information Containing:		1.9.4.1
	Name of offeror	XYZ Inc	
	Name of Official Point of contact	Ms. Jane Smith	
	Title of POC	President	
	POC Phone Number	310-555-1234	

E-Mail Address	contractor.com
Address Line 1	123 West St
Address Line 2	Suite 500
Address Line 3	Mail Stop 422
Address Line 4	Blank
City	Any town
State	Any state
Zip Code	11111-1111
Title of Proposal	NPOESS EMD & Production Phase
Classification of Proposal	Unclassified

(2) **PROPOSAL ORGANIZATION.** To aid in the evaluation of volumes, all proposals shall follow the same general format. Proposal volumes and page limits are identified in the tables below.

(3) **FILE DIRECTORY 1 - PROPOSAL INFORMATION.** This directory DIR_1 shall include the following files as named. Specific instructions for these files are in the corresponding Sec. L&M reference.

FILE NAMES	DIRECTORY 1 CONTENTS	SECTION L&M REF
DIR1CVR.PDF	Cover page for proposal	X.X.X
TBLCONT1.PDF	Table of Contents for Directory 1	X.X.X
REFMAT.PDF	List of Technical Reference Material (if applicable)	X.X.X
ACRONYM.PDF	List of acronyms for entire proposal	X.X.X
Volume I – Executive Summary ***Page Limitation: 10 Pages***		
EXECSUM.PPT	Executive Summary	
Volume II – Mission Capability ***Page Limitation: 250 Pages***		
MC1.PDF	Chapter 1 – System Performance	
MC2.PDF	Chapter 2 – Segment Design	
MC3.PDF	Chapter 3 – Systems Engineering, Integration, and Test (SEIT)	
MC4.PDF	Chapter 4 - Planning	
MC5.PDF	Chapter 5 – Management and Organization	
Appendices Volume II - Mission Capability		
FILE NAMES	*CONTENT*	*SEC L&M REF* *PAGE LIMIT*
IMS.MPP	Appendix A – IMS	None
IMP.PDF	Appendix A - IMP	50
XREF.PDF	Appendix C – Cross-Reference Matrix	None
EVALUE.PDF	Appendix D - Earned Value Mgt. Approach	10
PLANS.PDF	Appendix E – Technical Plans	None
Volume III – Past Performance ***Page Limitation: 45 pages (3 pages per contract)***		
PASTPERF.PDF	Past Performance	
Volume IV - Cost/Price Proposal ***No Page Limitation***		
COST.PDF	Section 1 – General Instructions	
COSTS.XLS	Section 2 – Cost Information	
OTHER.PDF	Section 3 – Other Information	
V3APPA.XLS	Appendix A – Basis of Estimate	

(4) **FILE DIRECTORY 2 - MODEL CONTRACT, ATTACHMENTS & SUPPORTING DOCUMENTATION.** This directory DIR_2 shall include the listed files. Specific instructions for these files can be found in the referenced RFP paragraph. No signatures are required in the electronic files.

FILE NAMES	DIRECTORY 2 (DIR_2) CONTENTS	SECTION L&M REF
DIR2CVR.PDF	Cover page for model contract	
TBLCONT2.PDF	Table of Contents for Directory 2	
Volume V - Model Contract		
SF33.DOC	Solicitation Offer and Award (Section A)	
MODEL.DOC	Model Contract (Sections B - J)	
EXHIBITA.DOC	Exhibit A - Contract Data Requirements List (CDRL)	
ATCH1.DOC	Atch 1 - Integrated Master Plan (IMP)*	
ATCH2.DOC	Atch 2 - System Performance Specification	
ATCH3.DOC	Atch 3 -Contract Work Breakdown Structure (CWBS)	
ATCH4.DOC	Atch 4 - Award Fee Plan	
ATCH5.DOC	Atch 5 - Government Furnished Property (GFP)	
ATCH6.DOC	Atch 6 - Technical Data Restrictions	
ATCH7.DOC	Atch 7 - SB/SDB Subcontracting Plan	
ATC8.DOC	Atch 8 - Contract Sec Classification Spec (DD Form 254)	
Additional Documentation as Appendices to Volume V		
APPENA.PDF	Appendix A – Representations And Certifications	
APPENB.PDF	Appendix B – Exceptions	
APPENC.PDF	Appendix C – Authorized Representative	
APPEND.PDF	Appendix D - Location Information	
APPENE.PDF	Appendix E - GFP Written Authorization	
APPENF.PDF	Appendix F – Instrument Subcontract Arrangements	
Volume VI – Program Risk Mitigation Oral Presentations No page limit		
OPRESNET.PPT	Oral Presentation Charts	

The entire IMP shall not exceed 50 pages. The IMP tasks shall not exceed 5 pages and the narrative portion of the IMP shall no exceed 25 pages. General information shall not exceed 20 pages.

L&M-518 — PREVIOUSLY-SUBMITTED DATA

(a) The Offeror's CD-ROM submission may include previously-submitted data. Previously-submitted data includes any document, report, study, drawing, memoranda or other item produced during the NPOESS Program Definition and Risk Reduction program that was delivered to the IPO on or before February 1, 2002. Offerors are allowed to hyperlink from the proposal to a relevant section of a file contained in the previously submitted data section of the CD-ROM. The offeror shall not hyperlink to a general area of a file or to the first page (cover page) of a file but rather to the specific information substantiating a specific claim made in the proposal.

(b) Previously-submitted data is not considered part of the offeror's proposal, and may be used only to illustrate or amplify points or assertions made in the proposal. Where previously-submitted data is provided and used in this manner, it will be evaluated against the criteria of this Section L & M.

L&M-520 — PROPOSAL VOLUME REFERENCE SUMMARY

insert a table that illustrates—

VOLUME NO	VOLUME NAME	PAGE LIMIT	PAPER COPIES	L&M REF PARA.

L&M-521 — EXECUTIVE SUMMARY – VOLUME 1

Provide a brief overview of the total proposal describing how the objectives stated in the SOO shall be met in defining and executing the system design and fabrication. This summary shall convey that the offeror understands the requirements and objectives of the overall NPOESS program, and the specific objectives and requirements of TRD. The Executive Summary will not be evaluated.

L&M-522— MISSION CAPABILITY — PROPOSAL VOLUME 2 — GENERAL

The Mission Capability section provides the offeror an opportunity to describe the proposed system and explain how the performance satisfies the requirements of the TRD and meets objectives of the SOO. This section shall be linked to previously submitted data and/or the Program Risk Mitigation Oral Presentation, where necessary. Element level specifications and Interface Control Documents (ICDs) shall be provided as reference documents. An integrated assessment of Mission Capability and Proposal Risk will be made based upon the material provided by the offeror. Within the Segment Design Sub-factor Space and IDP are more important than C3 and field terminals that are equally important and more important than Launch SupportMission Capability subfactors will be evaluated using the criteria and the sub-indentured evaluation criteria contained in each element of the combined instructions to the offerors.. The sub-indentured criteria is designed to provide the offerors with information and insight into the way the Government plans to evaluate the proposal, Program Risk Mitigation Oral Presentation, and Final Clarification Video Presentation

The rating definitions in Table L&M-xxx will be used to evaluate mission capability.

Table L&M-xxx — Mission Capability Evaluation Ratings
(assigned at the subfactor level)

Color	Rating	Definition
B	Exceptional	Exceeds specified minimum performance or capability requirements in a way beneficial to the Government.
G	Acceptable	Meets specified minimum performance or capability requirements necessary for acceptable contract performance.
Y	Marginal	Does not clearly meet some specified minimum performance or capability requirements necessary for acceptable contract performance, but any proposal inadequacies are correctable.
R	Unacceptable	Fails to meet specified minimum performance or capability requirements. Proposals with an unacceptable rating are not awardable.

Source: see AFFARS 5315.___-_____.

L&M-522-1 — MISSION CAPABILITY — PROPOSAL VOLUME 2 — VOLUME INSTRUCTIONS

Section 1 – Subfactor 1 – System Performance. This section outlines the overall performance of the proposed NPOESS. The focus of the section is the configuration of the proposed system, its Concept of Operations (CONOPS) and its system level performance compared to the TRD. This section outlines the information required to make an overall system performance assessment.

(1.1) System Compliance.

(1.1.1) Instructions. The offeror shall provide its performance baseline in table format showing all performance characteristics, including EDRs and each EDR attribute, described in its System Specification as it relates to the TRD. This shall include a description of the benefits and impacts of those parameters that exceed or do not meet threshold requirements and the rationale for not meeting the threshold. TRD requirements fullfilled by the Aerosol Polarimeter Sensor (APS) should not be included in this description nor the System Performance Specification. (Do not resubstantiate EDR performance of IPO procured sensors that meet TRD thresholds.)

(1.1.2) Evaluation Criteria. The proposal and System Specification will be evaluated against the TRD to ensure threshold performance requirements are met. Where they do not meet threshold, the reasonableness of the rationale will be evaluated.

(1.2) System Description.

(1.2.1)Instructions. The offeror shall—

(a) Provide an overall system description/CONOPS for all the segments that are addressed in the subsequent sections.

(b) Provide a data flow diagram that depicts the data flow from the sensor measurement to the actual production of user environmental data.

(c) Describe the trades conducted and how they resulted in best value to the Government.

(1.2.2) Evaluation Criteria.

(a) The System CONOPS will be evaluated for compliance with the offeror's system specification.

(b) The data flow diagram will be evaluated to ensure that it addresses the entire system data flow and processing for NPOESS and NPP.

(c) The proposal will be evaluated against the trade-off process referenced in provision L&M-5xx (NPOESS System Prioritization).

Section 2 – Subfactor 2 – Segment Design. The focus of the section is the allocation of system level requirements to each of the segments, the ability of segment designs to achieve those requirements, trades in and rationale for deviations from government procured sensor baselines and design provisions for flexibility and growth. This section outlines the information required to make an integrated assessment of the ability of the offeror's design to achieve predicted performance.

(2.1) Space Segment.

(2.1.1) Instructions. The offeror shall—

(a) Provide the allocation of the system specification requirements to the space segment.

(b) Describe the satellite design and how it will meet the requirements of the Space Segment Specification, including how the satellite design will facilitate data collection, generation of raw sensor data, and data flow.

(c) Describe any "deltas" in sensor design from the Government procured sensor baselines, and explain how the offeror's design is better or worse than the Government baseline.

(d) Discuss how design flexibility will accommodate segment changes/updates.

(e) Describe the benefit of any sensor design changes recommended by the offeror to, and accepted by, the Government in the PDRR phase.

(2.1.2) Evaluation Criteria.

(a) The proposal will be evaluated for accurate and complete flow down of the system requirements to the Space Segment specification.

(b) The satellite design will be evaluated against the parameters of the space segment specification. The Government's evaluation may include using simulation, inspection, and/or analysis.

(c) Parameters varying from procured sensor baselines will be evaluated against the requirements of the Space Segment specification. The Government will evaluate the technical rationale and design benefit for all attributes that vary from provided sensor baselines.

(d) The design will be evaluated for flexibility to accommodate (a) technology assessment, development, and insertion; (b) component assessment and selection; (c) performance enhancements; (d) requirement changes; and (e) future risk reduction plans for the space segment.

(e) The Government will evaluate the benefit of any sensor design changes recommended by the offeror to, and accepted by, the Government in the PDRR phase.

(2.2) Command, Control, and Communications (C3) Segment.

(2.2.1) Instructions. The offeror shall—

(a) Provide the allocation of the system specification requirements to the C3 segment specification.

(b) Describe how the C3 design meets the requirements of the C3 segment specification, including how the C3 design will facilitate data collection and data delivery.

(c) Describe the NPP C3 system design and the approach to transition from the NPP C3 architecture to the NPOESS architecture.

(d) Describe the benefit of any C3 segment design changes recommended by the offeror to, and accepted by, the Government in the PDRR phase.

(e) Describe the flexibility of its C3 architecture to accommodate additional remote sensing missions, in addition to NPOESS and NPP. (e.g., what generic changes would be required to command and recover data from a TOPEX and a EUMETSAT satellite?)

(2.2.2) Evaluation Criteria.

(a) The proposal will be evaluated for accurate and complete flow down of the system requirements to the C3 segment specification.

(b) The C3 Segment design will be evaluated against the parameters of the C3 segment specification. The Government's evaluation may include using simulation, inspection, and/or analysis.

(c) The NPP C3 Segment design will be evaluated for completeness, the ability to execute the program to meet NPP need dates, and optimization of the transition to NPOESS.

(d) The Government will evaluate the benefit of any C3 design changes recommended by the offeror to, and accepted by, the Government in the PDRR phase.

(e) The C3 architecture will be evaluated for flexibility to accommodate additional remote sensing missions. The design will be evaluated for flexibility to accommodate (a) technology assessment, development, and insertion; (b) component assessment and selection; (c) performance enhancements; (d) requirement changes; and (e) future risk reduction plans for the C3 segment.

(2.3) Integrated Data Processing Segment (IDPS).

(2.3.1) Instructions. The offeror shall—

(a) Provide the allocation of the system specification requirements to the IDP segment specification.

(b) Describe how the IDPS design meets the requirements of the IDP segment specification, including how the IDPS design will facilitate generation of RDRs and EDRs, and deliver data to external users.

(c) Describe any "deltas" in algorithm/science code design from Government procured sensor data processing baselines.

(d) Describe the NPP IDPS system design and the approach to transition from the NPP IDPS architecture to the NPOESS architecture. This includes a description of RDR and EDR processing.

(e) Describe the benefit of any algorithm design changes recommended by the offeror to, and accepted by, the Government in the PDRR phase.

(f) Describe the flexibility of its IDPS architecture to accommodate additional remote sensing missions, in addition to NPOESS and NPP. (e.g., what generic changes would be required to process data from a TOPEX and a EUMETSAT satellite?)

(2.3.2) Evaluation Criteria.

(a) The proposal will be evaluated for accurate and complete flow down of the system requirements to the IDPS specification.

(b) The IDPS design will be evaluated against the parameters of the IDP segment specification. The Government's evaluation may include using simulation, inspection, and/or analysis.

(c) Design parameters varying from procured sensor baselines will be evaluated against the requirements of the IDP segment specification. The Government will evaluate the technical rationale and design benefit for all attributes that vary from procured sensor baselines.

(d) The NPP IDP Segment design will be evaluated for completeness, the ability to process NPP generated data, the ability to execute the program to meet NPP need dates, and optimization of the transition to NPOESS.

(e) The Government will evaluate the benefit of any algorithm design changes recommended by the offeror to, and accepted by, the Government in the PDRR phase.

(f) The IDPS architecture will be evaluated for flexibility to accommodate additional remote sensing missions. The IDPS design will be evaluated for flexibility to accommodate *(i)* technology assessment, development, and insertion; *(ii)* component assessment and selection; *(iii)* performance enhancements; *(iv)* requirement changes; and *(v)* future risk reduction plans for the IDPS segment.

(2.4) Field Terminal Segment.

(2.4.1) Instructions. The offeror shall—

(a) Provide the allocation of the system specification requirements to the Field Terminal segment specification.

(b) Describe how the Field Terminal segment design software meets the requirements in the Field Terminal segment specification and the approach to identify Government hardware requirements.

(c) Describe EDR performance for HRD.

(d) Describe EDR performance for LRD.

(e) Discuss how design flexibility will accommodate segment changes/updates.

(2.4.2) Evaluation Criteria.

(a) The proposal will be evaluated for accurate and complete flow down of the system performance requirements to the Field Terminal segment specification.

(b) The Field Terminal segment design will be evaluated against the parameters of the Field Terminal segment specification and for the operational suitability of recommended LRD software and approach to identify Government hardware requirements. The Government's evaluation may include using simulation, inspection, and/or analysis.

(c) The segment design will be evaluated against EDR threshold performance requirements for HRD over a variety of environmental conditions.

(d) The LRD EDR Performance specification in the Field Terminal Segment specification will be evaluated for best value performance.

(e) The design will be evaluated for flexibility to accommodate *(i)* technology assessment, development, and insertion; *(ii)* component assessment and selection; *(iii)* performance enhancements; *(iv)* requirement changes; and *(v)* future risk reduction plans for the Field Terminal segment.

(2.5) Launch Segment.

(2.5.1) Instructions. The offeror shall describe the non-standard launch support requirements, any deviation from the Standard Interface Specification (SIS), and how the offeror will ensure that the requirements are supported. Detailed substantiation will be required if non-standard services are required to a large degree.

(2.5.2) Evaluation Criteria. The launch support requirements will be evaluated for completeness and soundness of approach.

Section 3 – Subfactor 3 -- Systems Engineering Integration and Test (SEIT) Subfactor 3. This section outlines the overall systems engineering requirements for the program. The focus of the section is system and segment integration, meeting objectives of the SOO, and a comprehensive system/segment level test program. A disciplined system engineering process, focused on reducing risk and cost, that is pervasive in terms of implementation of common tools and processes across the prime offeror, sister companies, subcontractors and vendors, is essential for program success. This section outlines the information required to make an assessment of the adequacy of the overall systems engineering approach proposed for the program.

(3.1) Systems Engineering Process.

(3.1.1) Instructions. The offeror shall—

(a) Describe the systems engineering process (including tools) and how it plans to integrate the subcontractor and sister company processes into a single process.

(b) Describe the plan to integrate its Systems Engineering process into the NASA NPP Systems Engineering process.

(c) Describe the approach to managing NPOESS and NPP external and inter-segment interfaces and identify all external and inter-segment interfaces, ICDs, POCs, etc.

(d) Describe the approach to EMI/EMC/RFI management, Contamination Control, and Configuration Management.

(e) Describe the approach to Risk Management. Identify the top 10 risks for both the NPOESS and NPP programs. Discuss the Risk Management Plans.

(f) Describe the software development process and tools to include software development controls and effectiveness metrics.

(3.1.2) Evaluation Criteria.

(a) The proposed system engineering process will be evaluated for a streamlined approach and the effective integration of the subcontractors and sister companies into the process.

(b) The plans for integrating the Systems Engineering process into the NASA NPP Systems Engineering process will be evaluated for streamlining and effectiveness.

(c) The approach and ICDs will be evaluated to determine that they are comprehensive, well defined, mature, and that adequate interface control has been established.

(d) The offeror's approach will be evaluated to assess the offeror's understanding of EMI/EMC/RFI management, Contamination control, and Configuration Management.

(e) The offeror's approach will be evaluated to assess the offeror's understanding of risk management, and demonstration of satisfactory plans for further risk management and mitigation.

(f) The process will be evaluated to to insure soundness of approach and fidelity of the tools. The proposed controls will be evaluated to insure that they are not redundant but provide development visibility that is meaningful.

(3.2) Calibration, Validation, and Verification Approach.

(3.2.1) Instructions. The offeror shall—

(a) Describe the end-to-end system-level plan in general for validating EDR and RDR products, including the pre-launch instrument characterization and EDR product simulation verification plans, the post-launch EDR and RDR product validation plans, and its long-term EDR and sensor calibration and validation monitoring and trending plans.

(b) Describe the analysis, tools, sensor engineering development units, WPTB, and external data and resources used throughout the EDR and RDR product development and verification process. This shall include a description of the verification of the offeror's modeling and simulation tools.

(c) Using the IPO cal/val plan, specify the required government support to its calibration, validation, and verification program.

(d) Describe how it will incorporate, track, and use government-provided truth data as described in the government draft NPP and NPOESS EDR and RDR Product Calibration and Validation Plans to support its EDR product verification effort.

(e) As examples of its Cal/Val program, provide end-to-end Cal/Val plans for the CrIS and VIIRS Sensors with sufficient detail to demonstrate knowledge of Cal/Val techniques.

(3.2.2) Evaluation Criteria.

(a) The general Cal/Val approach will be evaluated to ensure that it is reasonable and executable.

(b) The system tools and their utilization will be evaluated to ensure that the overall Cal/Val concept is comprehensive and will demonstrate EDR product performance.

(c) The level and type of government support/interaction will be evaluated for soundness of approach.

(d) The use of government-provided truth data within the EDR product verification approach will be evaluated for efficiency of calibration and validation efforts and synergy between the EDR product verification plan and Government verification efforts.

(e) The Cal/Val Plans will be evaluated for completeness and understanding of the CrIS and VIIRS calibration requirements.

(3.3) Test and Evaluation Approach.

(3.3.1) Instructions. The offeror shall describe the approach for manufacturing, integration, environmental, and acceptance testing and how they are integrated into the verification and test program following the guidance of the TEMP.

(3.3.2) Evaluation Criteria. The T&E program will be evaluated to ensure that it is a comprehensive system verification approach compatible with TEMP guidance, that it will ensure maximum use of early testing, and that redundant testing is minimized.

Section 4 – Subfactor 4 – Planning. This section outlines the overall program planning and control approach for the NPOESS EMD, Production and Support programs. The focus of the section is program planning implementing a real time Integrated Management Framework (IMF) to support program insight and control, and planning for development and deployment of the integrated logistics support program for NPOESS. This section outlines the information required to make an assessment of the adequacy of program planning, management and program processes, tools and procedures proposed by the offeror.

(4.1) Integrated Management Framework (IMF).

(4.1.1) Instructions. The offeror shall—

(a) Describe how the CWBS flows from the Government WBS provided in Annex A.

(b) Describe how the CSOW and ISOW flow from the SOO.

(c) Describe how the IMP and IMS flow from the CWBS, CSOW, and ISOW.

(d) Describe how the IMP and IMS formulate the BCWS.

(e) Show how it will use the Earned Value Management System (EVMS) to control the program and ensure it is executed to schedule and allocated budget.

(4.1.2) Evaluation Criteria.

(a) The offeror's IMF structure (CWBS, CSOW, ISOW, IMP, IMS) will be evaluated to ensure that the actions necessary to design, develop and produce the NPOESS are included and track with events, accomplishments, and criteria contained in the IMP and scheduled in the IMS.

(b) The offeror's EVMS will be evaluated to ensure that it provides accurate, timely, meaningful management control information. In addition, the EVMS will be evaluated to ensure that work packages link to the IMP and IMS events, accomplishments, and criteria.

(c) The extent to which technical performance measures and system maturity measures are incorporated into the EVMS will be evaluated.

(4.2) Integrated Master Plan (IMP).

(4.2.1) Instructions. The offeror shall—

(a) Provide an IMP following the instructions contained in Annex B, including directed events, and events that the offeror feels are critical to the program. As a general rule, the time between IMP events should be between six and nine months.

(b) The offeror shall provide IMP process narratives for its key systems engineering and management processes to include the linkages to subcontractors and sister divisions. These may be part of the reference file.

(4.2.2) Evaluation Criteria.

(a) The IMP will be evaluated to ensure it contains clearly measurable events supported with well-defined accomplishments and criteria, which enable the offeror to monitor and manage progress in EMD development and production.

(b) The processes described in the IMP will be evaluated to ensure they provide adequate controls and standardization and to ensure that they demonstrate that the offeror has adequate system engineering and management control processes in place for all aspects of the program.

(4.3) Integrated Master Schedule (IMS).

(4.3.1) Instructions. The offeror shall—

(a) Provide an IMS that details the program schedule required to execute the proposed program. The IMS shall include the following: *(i)* Linkage to the IMP events, accomplishments and criteria; *(ii)* the Critical Path clearly defined in the IMS; and *(iii)* a resource-loaded risk schedule.

(b) Submit a report of a Monte Carlo simulation of the IMS critical path, reflecting 20/80, 50/50, and 80/20 probabilities of success.

(4.3.2) Evaluation Criteria.

(a) The level of detail and integration of the IMS will be evaluated to determine how well it showsthe calendar schedule and task loading to achieve each significant event.

(b) The critical path will be evaluated to ensure that it is realistic, achievable, reflects a resource loaded risk schedule, and as demonstrated by Monte Carlo analysis, portrays a total program critical path.

(4.4) Supportability.

(4.4.1) Instructions. The offeror shall—

(a) Provide a summary ILS description that addresses the following ILS elements for NPOESS and NPP initial and follow-on operations and maintenance capability: *(i)* Maintenance planning concept; *(ii)* Supply support management concept; *(iii)* Packaging, Handling, Storage and Transportation concept; *(iv)* Support equipment concept; *(v)* Facility management concept; *(vi)* Manpower and personnel concept; *(vii)* Training management concept; and *(viii)* Computer resources management concept.

(b) Provide the plan to develop and provide Interim Contractor Support (ICS) through IOC, to include site activation support.

(4.4.2) Evaluation Criteria.

(a) The offeror's ILS description will be evaluated to determine if it conveys a clearly integrated support approach, including NPP operations and maintenance.

(b) The ICS plan will be evaluated to ensure that it provides a low risk, low cost approach to support operations through IOC.

Section 5 – Subfactor 5 – Management and Organization. This section outlines the overall management and organizational approach for the NPOESS EMD, Production and Support programs. The focus of the section is the offeror's approach to organizing, staffing and managing the NPOESS program within a Total System Performance Responsibility (TSPR) environment and the offeror's facilities and processes required to complete the EMD, Production and Support programs. This section outlines the

information required to make an assessment of the adequacy of organization and management approaches and plans proposed by the offeror.

(5.1) Overall Organizational Approach.

(5.1.1) Instructions. The offeror shall—

(a) Describe where the NPOESS program fits in the overall corporate and sector organizational structure.

(b) Describe the program director's reporting channels and authority.

(c) Identify the key teammates to include sister companies and their role in the program. The role should be defined in terms of work share and the basis of the work share determination.

(d) Describe the approach for integrating the teammates processes and management systems.

(e) Provide certification levels for quality, program management, systems engineering, and software development for the company and its teammates.

(f) Describe how it plans to flow down risks and incentives to its employees and suppliers.

(g) Describe the approach for accepting and executing Total System Performance Responsibility.

(h) Describe the approach for integrating Government Provided Sensor contractors into the program team and for providing the IPO with adequate insight into Government Provided Sensor production of Raw Data Records.

(i) Describe the approach to establish and maintain the algorithms and algorithm support facility, including use of the Operational Algorithm Teams (OATs).

(5.1.2) Evaluation Criteria.

(a) Organizational placement with respect to other programs being executed within the corporation or sector will be evaluated to assess the ability of the NPOESS manager to obtain corporation or sector resources and appropriate program priority.

(b) The NPOESS Program Manager's reporting chain and level of financial decision authority will be evaluated to assess the ability of the NPOESS program management organization to be responsive to IPO requirements.

(c) Span of control within the offeror's NPOESS organization and the offeror's proposed mechanisms for integrating subcontractors and sister companies will be evaluated to assess the offeror's ability to achieve adequate technical integration.

(d) The offeror's approach to integrating teammate processes and management systems will be evaluated to determine the degree of standardization and streamlining across the NPOESS organizational structure.

(e) Levels of certifications will be evaluated to determine the team's capabilities and to assess program risk.

(f) The risk and incentives plan will be evaluated to determine the breath and depth of the flow down to employees and teammates.

(g) The approach to accepting and executing TSPR will be evaluated to determine the offeror's ability to manage the NPOESS government and industry team to execute the NPOESS program within cost, schedule and performance constraints.

(h) The approach to integrating Government Provided Sensor contractor teams and for providing the IPO with adequate insight into Government Provided Sensor RDR production will be evaluated to determine how the offeror accomplishes these requirements in a TSPR environment.

(i) The offeror's approach to stand up and maintain the algorithm support facility will be evaluated to ensure that the facility can support day-to-day operations and system updates as they occur.

(5.2) Program Organizational Structure.

(5.2.1) Instructions. The offeror shall—

(a) Provide an NPOESS program organizational chart that outlines its Integrated Product Team (IPT) structure. The chart shall include depiction of how the NPOESS program integrates with company core organizations and how government representation on the IPTs will be implemented. Names of key

personnel (e.g. program manager and deputies, system engineer, program control, IPT leads, etc.) and their company affiliation shall be included as appropriate.

(b) The offeror shall describe the process used by the program and IPT leads to obtain the resources required for program execution (e.g., trained personnel, IT, tools, facilities, indirect funding, capital investment).

(c) The offeror shall provide brief biographies of its key program personnel to include teammates (Down to tier 3 in the program organizational structure).

(5.2.2) Evaluation Criteria.

(a) The organizational structure will be evaluated to ensure that IPTs are product oriented.

(b) The IPT resource acquisition process will be evaluated to ensure that IPT leads can obtain the resources required to deliver their products, and to be held accountable for delivering a product that conforms to requirements on schedule and on cost.

(c) Key personnel biographies will be evaluated to ensure that the offeror has staffed the NPOESS program with a leadership team possessing the knowledge, skills and experience required to deliver program success.

(5.3) Subcontract and Sister Company Management Approach.

(5.3.1) Instructions. The offeror shall—

(a) Describe how contract provisions and requirements will be flowed down to subcontractors and sister companies.

(b) Describe how subcontractor performance to schedule and cost targets will be managed.

(c) Describe how it will incentivize subcontractors and sister companies to provide superior program performance.

(5.3.2) Evaluation Criteria.

(a) The offeror's proposal will be evaluated to ensure that its flow down provisions are reasonable.

(b) Proposed subcontractor, sister company and vendor cost and schedule management controls will be evaluated to determine their consistency with the level of development and production risk.

(c) The offeror's incentivization approaches for its subcontractors and sister companies will be evaluated to ensure the offeror can achieve and maintain continued long-term commitment to the success of the program.

(5.4) Staffing Plan.

(5.4.2) Instructions. The offeror shall—

(a) Describe how it plans to staff the EMD program. This shall include skill categories by levels (i.e., junior, journeyman and senior software engineer, financial analyst, program management, etc.)

(b) Describe the sources that it plans to use to staff the program for each skill category. This includes both internal and external sources.

(c) Describe how it plans to manage the staffing as program requirements change. This includes plans to retain and reward personnel for their performance.

(5.4.2) Evaluation Criteria.

(a) The sufficiency of the proposed manning levels and skill mix will be evaluated to ensure that they are adequate to execute the program.

(b) Proposed staffing sources will be evaluated for adequacy in terms of total numbers and availability.

(c) The personnel management plan will be evaluated to determine if adequate controls exist to manage changing personnel requirements.

(5.5) Facilities Planning.

(5.5.1) Instructions. The offeror shall—

(a) Identify critical internal and external facility requirements to support the design, development, production, operation, and sustainment of the NPOESS system. This also includes test facilities. Describe the plans to take full advantage of existing DoD ranges, facilities, and other resources, whenever practical, and provide justification for using the offeror's own facilities when government facilities are available.

(b) Describe the facility need dates and period(s) of time that it will use the facility. This shall include necessary set up and teardown times.

(c) Identify any capital investment anticipated and construction that may be necessary to support the program.

(d) Identify any potential scheduling conflicts and how it plans to manage the potential conflicts.

(5.5.2) Evaluation Criteria.

(a) The facility plan will be evaluated to ensure that all required facilities are identified and that the availability of critical facilities will be actively managed. Additionally, the plan and justifications will be evaluated for appropriate use of government test facilities.

(b) Facility use dates will be evaluated to ensure that they are compatible with the overall program schedule and reflect reasonable periods of use.

(c) Proposed capital investments and facility construction requirements will be evaluated to ensure that they are consistent with program's schedule.

(d) Risks associated with potential facility conflicts will be evaluated to determine associated program impacts.

(5.6) Design and Production Processes.

(5.6.1) Instructions. The offeror shall describe how design and production processes are flexible enough to meet segment changes/upgrades necessitated by the changing needs of the program.

(5.6.2) Evaluation Criteria. Design and production processes flexibility will be evaluated for realism and executability.

L&M-523 — PAST PERFORMANCE — PROPOSAL VOLUME 3

The Government plans to use previous, relevant, past performance evaluations (i.e. PDRR source selections) as well as all relevant materials defining performance since March 1997 (past 5years The offerors shall submit these relevant materials via a Past and Present Performance Volume IV, due at the NPOESS IPO in Silver Springs, MD NLT noon _____. The offerors are cautioned that the Government will use this, and other sources of data, to determine performance and confidence assessments. Since the Government may not necessarily interview all offeror-provided sources, it is incumbent upon the offeror to explain the relevance of all data provided.

The Government will also be factoring problem solving, implementation methods, and success rates into the offeror's overall past performance assessment. Therefore, the offeror shall include, and identify as such, at least three relevant success/turnaround contracts detailing problems encountered, recovery methodologies, and relative success obtained in alleviating these problems as part of the past performance submissions specified in paragraph a. The offeror shall also submit, and identify as such, at least three relevant success/turnaround contracts for any subcontractor, teaming contractor, and/or joint venture partner that will be involved with the Interface Data Processing Segment (IDPS). The offeror shall also provide a listing of all contracts that have been terminated since March 1997 with a summary of the termination rationale.

Contracts involving tasks and products that most closely resemble the work that contractor/subcontractor will accomplish on NPOESS EMD/Production will have the most relevancy. Contracts involving tasks performed or products delivered prior to March 1997 will not be considered relevant. To aid in evaluating relevancy of submitted contracts, the offeror shall describe how the work performed under the submitted contract compares in complexity to the proposed effort and how the relevancy of this work applies to the five mission capability performance subfactors plus cost. Offerors should note that some contracts may be more complex than the proposed effort, but could be less relevant than contracts with similar complexity to proposed effort.

Offerors may submit current and past performance data occurring since March 1997 for themselves and for each proposed critical subcontractor (defined as a contractor whose work entails 10% or more of the total work scope), teaming contractor, and/or joint venture partner, that they consider relevant in demonstrating the ability to perform the proposed EMD/Production effort. The offerors' past performance information may include data on efforts performed by other divisions or corporate management only if such resources will be used or significantly influence the performance of the proposed effort. Contracts listed may include those with the Federal Government, state and local governments or their agencies, and commercial customers. Offerors that are newly formed entities without prior contracts or that do not possess relevant corporate past performance shall list contracts demonstrating the past performance of all key personnel. Volume IV should address Past and Present Performance contract information only. No introduction is permitted.

The Government plans to use previous, relevant, past performance evaluations (i.e. PDRR source selections) as well as all relevant materials defining performance since March 1997 (past 5 years). The rating definitions in Table L&M-xxx will be used to evaluate past performance.

Table L&M-xxx — Past Performance Evaluation Ratings
(assigned at the factor level)

Rating	Definition
HIGH CONFIDENCE:	(Exceptional Confidence) Based on the offeror's performance record, essentially no doubt exists that the offeror will successfully perform the required effort.
SIGNIFICANT CONFIDENCE	(Very Good Confidence) Based on the offeror's performance record, little doubt exists that the offeror will successfully perform the required effort.
CONFIDENCE	(Satisfactory Confidence) Based on the offeror's performance record, some doubt exists that the offeror will successfully

	perform the required effort.
LITTLE CONFIDENCE	(Marginal Confidence) Based on the offeror's performance record, substantial doubt exists that the offeror will successfully perform the required effort. Changes to the offeror's existing process may be necessary in order to achieve contract requirements.
NO CONFIDENCE	(Unsatisfactory Confidence)Based on the offeror's performance record, extreme doubt exists that the offeror will successfully perform the required effort.
UNKNOWN CONFIDENCE	No performance record identifiable (see FAR 15.305(a)(2)(iii) and (iv)).
Source: AFFARS 5315.___-____.	

Instructions – The offeror shall—
All information provided in Volume IV shall be displayed in landscape format (except award fee letters) and conform to the font and margin restrictions specified in this RFP. The page count limit is three pages per contract identified, not to exceed 45 pages. The total number of contracts shall not exceed eight contracts for the prime. For each critical subcontractor, teaming contractor, and/or if a joint venture, that is part of the offeror's team; the total number of contracts shall not exceed three. Questionnaire tracking records, contact data sheets, and client authorization letters are excluded from the page count limit. The Past Performance Volume shall contain the following sections.

Section 1 – Offeror's Experience Summary Table. Offerors shall submit an experience summary table, for all submitted programs, depicting whether their experience, or the experience of one of their critical subcontractors since March 1997. This section shall consist of one page following the table format shown below. The first column will denote whether the contract was accomplished by the prime contractor or by a sub-contractor. The second column will contain the name of the program being submitted for evaluation. The remaining columns will contain one of the following symbols.

A filled in circle (•) if effort performed for a particular program element since March 1997.
An open circle (O) if effort performed for a particular program element was earlier than March 1997.
A blank, if offeror or sub-contractor has no experience in this area.

Contractor / ***Program Element/ Proposal Requirement*** / Program		System Performance	Segment Design	SEIT	Planning	Management and Organization	Cost
	Contract 1						
	Contract 2						

a. Section 2 – Contract Descriptions. The offeror shall submit a description of contracts where it performed or is performing work as a prime contractor similar to the work contemplated by the RFP. This section shall be organized by contract and shall include the following information for each contract discussed:
   i. Contractor/Subcontractor places of performance, CAGE Codes and DUNS numbers
   ii. Government contracting activity, address, telephone, and fax number
   iii. Name, address, telephone, and fax numbers for:
      a. Procuring Contracting Officers, Contract Administrators, Administrative Contracting Officers

b. Program, Project, or subcontract Managers – Procuring Agency
c. Technical representative – Procuring Agency
d. Other Cognizant Authorities (e.g., previous program managers, Contracting Officers, technical leads)

iv. Contract Number

v. Contract Type

vi. Award date

vii. Awarded price/cost – Final negotiated price/cost

viii. Final, or projected final, price/cost - Actual

a. Contract cost for the time period being evaluated, vs. cost of the program over whole lifecycle.

b. Contract cost by subcontract, vs. cost of entire project (when applicable)

ix. Original delivery schedule – Final Negotiated (contractual) delivery schedule

x. Final, or projected final, delivery schedule

xi. If a fee or incentive type contract, specify the percentage of the fee for each period since March 1997. Provide rating and accompanying rationale.

xii. Performance and Relevancy Narratives. Offerors shall provide a specific narrative explanation of each contract listed describing the objectives achieved and detailing how the effort is similar to any requirements of this solicitation. (NOTE: Not all submitted contracts need address all requirements.) This discussion shall justify ratings given in the Relevancy Matrix for this contract (see Item 13) by specifically addressing the relevancy criteria used for this evaluation. For contracts awarded prior to March 1997, limit the narrative discussion to work performed since that date. The narrative shall explain what design and test milestones were accomplished and/or products delivered since March 1997. If it is necessary to refer to earlier work at any point in the narrative, specifically identify it as such. Include a brief explanation and corrective action for any contracts that did not meet original cost, schedule, or technical performance requirements. List each time the delivery schedule was revised and provide an explanation of why the revision was necessary, including clarification of whether cost and or schedule revision(s) were government directed. If final or projected costs are greater than award costs, quantify how much of the cost growth was ***not*** due to government directed added scope, schedule slips, etc. Provide a copy and a summary of any cure notices or show cause notices received on each contract listed and a description of any corrective action taken. Indicate if any of the contracts listed were terminated and the type and reasons for the termination.

xiii.

The offeror shall also include a narrative description of the relevance of the offeror's past performance to each of the Mission Capability Sub-factors identified in the relevancy matrix below, and shall point out how the contract met or achieved those critical areas. The narrative shall also include a description of how that past performance is relevant to the proposed NPOESS effort. The relevancy description shall focus on the similarities between the work performed on that contract and the work that contractor will perform on NPOESS, rather than a description of how that experience, expertise, and/or product will benefit the NPOESS program in general.

The offeror may describe any current quality awards, provided to the segment of the company that will support the NPOESS EMD/Production effort or certifications that indicate the offeror possesses a high-quality process for developing and producing the product or service required. Examples of such awards or certifications include: the Malcolm Baldrige Quality Award, other government quality awards, and private sector awards or certifications. Identify the segment of the company received the award or certification, the award duration (i.e. yearly, quarterly, etc), when it was bestowed, and why they received this award. The offeror shall not include performance data from other divisions or "corporate management" entities not planned for direct involvement during the execution of the program.

For those efforts in which the offeror is aware of unfavorable and/or Marginal past performance, but in which the offeror has made significant progress not yet credited or formally documented, the offeror shall provide a narrative explaining "fixes" made to date or any other information regarding the unfavorable/Marginal assessment. The offeror shall include similar language for each critical subcontractor, teaming contractor, and/or joint venture partner for whom this is applicable. The narrative shall contain evidence of the offeror's ability to isolate the root causes of problems and shall describe programs or actions taken to resolve those causes. The offeror shall describe all lessons learned in such a way as to show benefit on the NPOESS EMD/Production contract. Problems not addressed by the offeror, but found by the government during the evaluation of the information in this volume or independently obtained, will be assumed to still exist. Note: In the case of the Air Force's Contractor Performance Assessment Reporting System (CPARS), if the offeror has already provided input and the rationale/ circumstances have not changed, DO NOT repeat them here. The Government will use data provided by each offeror in this volume and data obtained from other sources in the development of performance risk assessments. Also, the Government will use the Past Performance Questionnaire (Annex C) to obtain past performance information. The Government reserves the right to change and/or supplement the questionnaire.

xiii. Experience Matrix. Offerors shall also submit a experience matrix for each contract with the information provided in the matrix corresponding to the narrative provided above. Each contract or subcontract on which experience was gained in a Mission Capability sub-factor shall have a matrix filled in as shown below. The "P/S" column must have a P or S to denote that the experience was either as a prime contractor or as a sub-contractor. The "Relevancy" column shall denote relevance, using the definitions in paragraph 3.0.4, of the team's experience in the contract with respect to the role that team will perform on the NPOESS effort. Fill each space in the columns, unless the contract reflects no experience in that area, in which case the space is to be left blank.

NOTE: The Government will regard as relevant only information pertaining to contracts currently in development or production, completed, or awarded since March 1997.

RELEVANCY MATRIX		P/S	Relevancy "1" to "5"
CONTRACTOR:			
M. C. Subfactors	System Performance		
	Segment Design		
	SEIT		
	Planning		
	Management and Organization		
Cost			

Items b) (i) through b) (xii) and award fee percentages shall be addressed together under one table. The "Relevancy Matrix" is to be placed to the right of the first table and the "Performance and Relevancy Narratives" is to be placed below the matrix.

Section 3 - Subcontracts. Offerors shall provide a summary outline of how the effort required by the solicitation shall be assigned for performance within the contractor's corporate entity and among the proposed subcontractors. Offerors shall provide the information required above for any proposed subcontractor who shall perform a significant portion of the NPOESS EMD effort.

Section 4 - New Corporate Entities. New corporate entities may submit data on prior contracts involving its officers and employees. However, in addition to the other requirements in this section, the offeror shall discuss in detail the role performed by such persons in the prior contracts cited.

Section 5 – Questionnaires. So that the Government may know from whom it should expect a completed Past and Present Performance Questionnaire, the offeror shall provide a listing of the entities from whom it has requested submission of a questionnaire (see sample tracking record in the NPOESS electronic library (http://npoesslib.ipo.noaa.gov). This section will also include a photocopy

of each such request. Questionnaires are to be sent by offeror to Government PM's, CO's, etc. (See Annex C for specific guidance regarding questionnaires).

Section 6 – Award Fee Letters. For submitted contracts that have award fee, offerors shall submit Fee Determining Official award fee letters. Only submit letters from within the last three years. These letters shall not count toward the page count of this volume. If a letter(s) cannot be found, provide an explanation of efforts accomplished and a point of contact used to obtain other letters for the contract. If an award fee percentage is available where there is no letter available, submit the percentage.

Section 7 – Classified Proposals. The contracting officer's approval is required prior to submitting classified information, and instructions for submission will accompany the approval. Classified pages shall count against the total page limitation (if any) for the affected volume.

Evaluation Criteria

The Performance Risk Assessment Group (PRAG) will evaluate relevant current and past performance occurring since March 1997 to assess confidence in the ability of each offeror's team to meet the requirements of this solicitation. The main purpose of the past performance evaluation is to assess the demonstrated record of performance of each offeror's team in relevant management, cost, and technical experience with the life-cycle development of similar systems, including, but not limited to, space-based remote sensing systems, distributed ground and communications architectures, large software development contracts, multi-satellite constellations, taskable satellite systems, on-orbit operations, and producibility/production experience of the offeror and the offeror's participating divisions and proposed subcontractors. Experience of the offeror as a subcontractor on similar efforts, commercial work, and independent research and development (IR&D) are also relevant. The Government will consider an offeror's demonstrated record of contract compliance in supplying products and services that meet users' needs, including cost and schedule. The performance risk assessment will be focused on the mission capability subfactors and cost control. The performance risk assessment will result in ratings of High Confidence, Significant Confidence, Confidence, Little Confidence, or No Confidence based on the degree of doubt that exists regarding the offeror's likelihood to successfully perform the required effort as promised. Where no relevant past performance is available, a neutral rating shall be applied. Based on these subfactor evaluations, an overall performance risk rating encompassing the offeror's proposal, as a whole will be assigned. Information in Volume IV of the offeror's proposal, along with any other past or present performance information available to the Government, will be used in the Past Performance evaluation.

Relevant past performance information will be obtained through CPARS; questionnaires tailored to the circumstances of this acquisition; Defense Contract Management Agency (DCMA) channels; and interviews with program managers and Contracting Officers, or other sources known to the Government, including commercial sources. In conducting the performance confidence assessment, the Government reserves the right to use both data provided by the offeror and data obtained from other sources. This information may include data on efforts performed by other divisions, critical subcontractors, or teaming contractors, if such resources will be brought to bear or significantly influence the performance of the proposed effort. Offerors will be provided an opportunity to address any negative or adverse past performance information received by the PRAG during this evaluation (subject to the restrictions of FAR 15.306(e)(4)), which they have not had an opportunity to address in the past.

Relevancy is a threshold question when considering past performance, not a separate element of past performance. A "1" to "5" relevancy rating will be used. A contract rated "3" or higher will be considered relevant for this solicitation. Irrelevant past performance shall not be used during the past performance evaluation process to form the basis of a risk/confidence assessment. Relevancy will be again verified after receipt and review of CPARs and questionnaires. The following table will be used as a guide for determining relevancy.

MC Subfactor	Relevancy Ratings					
System Performance	None	Low = 1	Med Low = 2	Medium = 3	Med High = 4	High = 5
Segment Design						
SEIT						
Planning s						
Management & Organization						
Cost						

Irrelevant	Relevant

NOTE: A rating of 4 or 2 is possible. A 4 rating shall be given when past performance data exceeds the criteria of a 3 but does not fully meet the criteria of a 5. A 2 rating shall be given when past performance data exceeds the criteria of a 1 but does not fully meet the criteria of a 3.

The criteria tables on the following pages will be used to establish a relevancy for each submitted contracts.

Relevancy Criteria Tables

Mission Capability				
System Performance				
	High = 5	Medium = 3	Low = 1	None = 0
Relevancy Rating *Equally relevant to hardware and software contracts*	Since March 1997: Was in an EMD phase (higher relevance since this is the kind of contract we're looking for) - **AND** – Includes both space and ground elements - **AND** – Includes end to end system performance responsibilities	Since March 1997: Was in a Concept Definition phase - **AND** – Includes a space element - **OR** – *(an AND here would make this a relevancy of 4)* Includes a ground element - **AND** – Includes end to end system performance responsibilities	Since March 1997: Was in a pre-Concept Definition - **OR** – *(an AND here would make this a relevancy of 2)* Includes a space or ground element - **OR** – *(an AND would make this a relevancy of 2)* Includes end to end system performance responsibilities	Since March 1997: Was not involved in any government acquisition process - **AND** – Does not include a space or ground element - **AND** – Does not include end to end system performance responsibilities

Segment Design				
	High = 5	Medium = 3	Low = 1	None = 0
Relevancy Rating *Note: If system is not operational, decrease relevancy by at least one point*	Since March 1997: Directly involved with the construction and/or operation of a new space environmental data collection system. -**AND**- Directly involved	Since March 1997: Directly involved with the construction and/or operation of a new space environmental data collection *system*. - **OR**– *(an AND here would make*	Since March 1997: Involved only sensors or components of a system - **OR** – *(an AND here would make this a relevancy of 2)* Involved	Since March 1997: Was not involved with any system - **AND** – Not involved with any integration of a space system - **AND** – Not involved with a

	with the integration and/or operation of multiple independent <u>*sensors*</u> in a single space platform. -**AND**- Directly involved with the ***<u>development</u>*** and/or operation of a new ground environmental data processing system -**OR**- Directly involved with the ***<u>integration</u>*** of environmental data into existing ground systems	*this a relevancy of 4)* Directly involved the integration of multiple independent <u>*components*</u> into a single space system -**OR**- Directly involved with the ***<u>integration</u>*** of environmental data into existing ground systems	integration of a single ***component*** into one system - **OR** – *(an AND here would make this a relevancy of 2)* Involved with only sending data to ground systems	ground comm. or architecture.

System Engineering, Integration, and Test (SEIT)				
	High = 5	Medium = 3	Low = 1	None = 0
Relevancy Rating *More relevant to hardware than to software contracts*	Since March 1997: Directly involved with testing AND calibrating a spaceborne **environmental (i.e. meteorological)** data collection/processing system. -**AND**- Directly involved with multiple satellite/sensor AND comm. interfaces (satellite/ground/user) -**AND**- Involved with **environmental (i.e. meteorological)** data processing	Since March 1997: Directly involved with testing AND calibrating a spaceborne data collection/processing system. - **OR**– *(an AND here would make this a relevancy of 4)* Directly involved with multiple satellite/sensor AND comm. interfaces (satellite/ground/user) - **OR**– *(an AND here would make this a relevancy of 4)* Involved with data processing	Since March 1997: Involved with testing AND calibrating a spaceborne data collection/processing system. - **OR** – *(an AND here would make this a relevancy of 2)* Involved any data interfacing effort - **OR** – *(an AND here would make this a relevancy of 2)* Involved any data effort	Since March 1997: Was not involved with any spaceborne data collection/processing system. - **AND** – Not involved with complex satellite/sensor interfaces AND complex comm. interfaces (satellite/ground/user) - **AND** – Not involved with any data effort

Planning				
	High = 5	Medium = 3	Low = 1	None = 0
Relevancy Rating *Equally relevant to hardware and software contracts*	Since March 1997: Directly involved with developing and maintaining Plans (Needs some specifics: IMP/IMS/CONOPS/Staffing/Training (?))	Since March 1997: Directly involved with maintaining Plans	Since March 1997: Plans developed and maintained by external agency	Since March 1997: No plans involved

Management and Organization				
	High = 5	Medium = 3	Low = 1	None = 0
Relevancy Rating *Equally relevant to hardware and software contracts*	Since March 1997: Directly involved in building OR operating a spaceborne **environmental** data collection/processing system. -**AND**- Involved with processing meteorological, oceanographic, or land data for multiple users	Since March 1997: Directly involved with enhancing an existing spaceborne **environmental** data collection/processing system. - **OR**– *(an AND here would make this a relevancy of 4)* Involved processing meteorological, oceanographic, or land data for multiple users	Since March 1997: Involved spaceborne data collection/processing effort. - **OR** – *(an AND here would make this a relevancy of 2)* Involved in producing any kind of information for the user	Since March 1997: Was not involved with any data collection/processing effort. **AND** – Not involved with producing any information for a customer

Cost				
	High = 5	Medium = 3	Low = 1	None = 0
Relevancy Rating *Equally relevant to hardware and software contracts (This is the only area considering performance over more than the past 3 years)*	> $500M -**AND**- < 15 year effort duration	$100M - $500M - **AND** – > 3 year effort duration	< $100M - **OR** - < 3 year effort duration	No contracts experience.

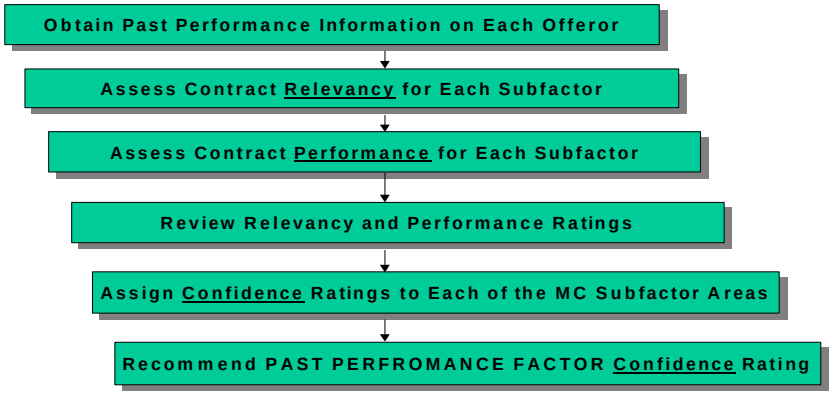
The performance confidence assessment represents the evaluation of an offeror's relevant past work record in terms of the Government's confidence in the offeror's ability to successfully perform as proposed. A past performance confidence assessment will be done at the subfactor level and integrated into an overall past performance factor confidence recommendation, using the ratings of High Confidence, Significant Confidence, Confidence, Unknown Confidence, Little Confidence, or No Confidence, based on the degree of doubt that exists regarding the offeror's

likelihood to successfully perform the required effort as promised. Where no relevant past performance is available, an Unknown Confidence rating shall be applied. AFFARS 5315.305(a)(2) describes the past performance evaluation process and provides definitions for the various ratings.

Where the performance record indicates performance problems, the Government will consider the number and severity of the problems and the appropriateness and effectiveness of any corrective actions taken (not just planned or promised). The Government may review more recent contracts or performance evaluations to ensure corrective actions have been implemented and to evaluate their effectiveness. Offerors will have the opportunity to address any negative or adverse past performance information received by the PRAG during this evaluation (subject to the restrictions of FAR 15.306 (e)(4), for which they have not had an opportunity to address in the past.

Offerors without a record of relevant past performance or for whom information on past performance is not available will not be evaluated favorably or unfavorably on past performance and, as a result, will receive an "Unknown Confidence" rating for the Past Performance factor. More recent and relevant performance will have a greater impact on the Performance Confidence Assessment than less recent or relevant effort. A strong record of relevant past performance may be considered more advantageous to the Government than an "Unknown Confidence" rating. Likewise, a more relevant past performance record may receive a higher confidence rating and be considered more favorably than a less relevant record of favorable performance.

Past Performance Assessment Process



Step 1. Obtain Past Performance Information on Each Offeror:
The Performance Risk Assessment Group (PRAG) reviews Offeror's Past Performance Volume, and obtains responses to questionnaires, CPARs and DCMA historical data on the bidding/performing business units, interviews, and other external sources (business/internet).

Step 2. Assess Contract Relevancy for Each Subfactor:
The PRAG will evaluate all contracts submitted by the Offerors in their Volume IV for relevancy at the Mission Capability subfactor level and cost. Each contract subfactor and cost will be evaluated against the Relevancy Criteria defined above developed by the PRAG and provided to the Offerors. The methodology used will be centered on a numeric rating scale. For each of the subfactors and cost, all contracts will be reviewed and given one of the numeric relevancy ratings: i.e., 5 [Very Relevant]; 3 [Somewhat Relevant]; and 0 [Not Relevant]. The numeric ratings will help the PRAG focus on the most relevant contracts per subfactor and cost factor.

Step 3. Assess Contract Performance for Each Subfactor:

The PRAG will then assess the data obtained (proposal volume, questionnaire answers, CPARs, etc.) and assign past/present performance ratings by subfactor and cost factor by contract as defined in AFFARS 5315.305(a).

Step 4. Review Relevancy and Performance Ratings:
The PRAG will review the Relevancy/Performance ratings on all relevant contracts for all subfactors and cost. This review is intended to verify the accuracy of the ratings recorded from Steps 2 & 3. In addition, the PRAG team will assign a risk assessment for each of the subfactors. These assessments will be based on independent consideration of all relevant past performance data received and of the complexities and unique features of the evaluated program, and must include an assessment of contractor efforts to resolve problems encountered on prior contracts. The following assessment flow diagram is included to facilitate risk assessment determination. The PRAG Chairperson will review the assessments of all offerors to ensure overall consistency. If the PRAG cannot find any relevant information, an offeror's lack of past performance will be treated as an unknown performance risk that is neutral, having no positive or negative evaluative significance.
Step 5. Assign Confidence Ratings to Each of the Mission Capability Subfactor Areas:
The PRAG will use the relevancy ratings in conjunction with the performance ratings to determine confidence ratings for each contract evaluated. Contracts with "5" relevancy ratings (Very Relevant) will be the focus of the PRAG's performance confidence assessment at the Mission Capability subfactor level and cost. Contracts with "3" relevancy ratings (Somewhat Relevant) will also be considered but will carry less weight. Given the past performance on relevant contracts identified, the PRAG will assess each Offeror's performance confidence by Mission Capability Subfactor and Cost and assign confidence ratings of High Confidence, Significant Confidence, Confidence, Unknown Confidence, Little Confidence or No Confidence.

Step 6. Recommend Past Performance Factor Confidence Rating:
The PRAG will assess each Offeror's Mission Capability Subfactor and Cost performance confidence ratings and recommend an overall Offeror "Confidence" rating for the Past Performance Factor. The overall past performance ratings possible are High Confidence, Significant Confidence, Confidence, Unknown Confidence, Little Confidence and No Confidence. The PRAG will assess a confidence rating, based on the degree of doubt of an offeror executing the requested performance, given their demonstrated past performance. In doing so, the following definitions are used to define performance risk:

L&M-524 — COST — PROPOSAL VOLUME 4 — GENERAL

(a) Cost will be evaluated for realism and substantiation. Each element of cost shall have a program risk assessment that will be dollarized to develop a Most Probable Cost (MPC) estimate. The Government will use the MPC to negotiate contract cost. The MPC will be provided to the offerors prior to their video submission so that they can adjust their proposals if they desire.

(b) These instructions are provided to assist the offeror in developing and presenting information required to support the Cost Proposal. Compliance with these instructions is mandatory and failure to comply may result in the proposal being determined to be non-responsive to the solicitation.

(c) Cost Information Requirements. In accordance with FAR 15.403-1(b) and 15.403-3(a), information other than cost or pricing data is required to support the Government's evaluation of price reasonableness and cost realism. Information required shall be provided in accordance with the tailored formats specified hereunder. However, use of offeror formats is encouraged providing that all the required information is made available This information is not considered cost or pricing data and thus certification is not required in accordance with FAR 15.406-2. If, after receipt of proposals, the Contracting Officer determines that there is insufficient information available to determine price reasonableness and none of the exceptions at FAR Subpart 15.403-1 apply, the offeror will be required to submit cost or pricing data.

(d) Required Data. All information relating to the proposed cost or pricing data, including all required supporting documentation, must be included in the section of the proposal designated as the Cost/Price Proposal volume. Cost-related information such as cost trade-off information, work hour estimates, and material kinds and quantities may be used in other volumes only to the limited extent necessary.

(e) Estimating Techniques and Methods. The offeror and its subcontractors may submit cost estimates using appropriately validated parametric models that are part of their disclosed cost estimating systems. These cost estimates shall include contemporary estimating methods such as cost-to-cost and cost-to-non-cost estimating relationships (CERs); commercially available parametric cost models; and in-house developed parametric cost models. If necessary, reasonable and supportable allocation techniques may be used to spread hours and/or cost to lower levels of the Work Breakdown Structure (WBS). The offeror's use or non-use of parametric estimating techniques for this proposal will not be a factor (positive or negative) in the evaluation of the offeror's response to this solicitation. Cost estimates submitted using such parametric models shall produce cost estimates that are reasonable and consistent and as such create a basis for negotiation of price.

(f) Contractor Cost Model and Cost Proposal. The offeror may reference its life-cycle cost estimate model submitted in Section 4 of its Cost Volume as a response to other requirements listed in this RFP. However, the information requested below must be contained in the contractor LCCE model. In addition, if the information is not identified in the same format, the contractor shall provide a detailed explanation as to where the information will be found.

(g) Instructions. The offeror shall provide the Cost/Price Volume in four sections as follows—

Section 1 – Introduction;
Section 2 – Cost Information;
Section 3 – Other Information; and
Section 4 – Preliminary Design Review (PDR) Life-Cycle cost Estimate (LCCE).

These sections are described in L&M-524-1.

(h) Cost Evaluation Criteria. The evaluation of contract price will include an assessment of realism, reasonableness, and other factors as defined below. Any supplemental cost proposals submitted in accordance with this Section will also be assessed for realism and reasonableness.

(1) Realism.

(1.1) To ensure that the offeror's proposed costs are consistent with its technical proposal and reflect a clear understanding of the program requirements, the Government will perform a Cost Realism Analysis (CRA) in accordance with FAR 15.404-1(d)(2). This is an assessment of the compatibility of the proposed cost with the proposal scope and efforts, the list of estimating ground rules and assumptions, and the schedule duration.

(1.2) As part of the CRA, the Government will develop a Probable Cost (PC) for each offeror's cost proposal in accordance with FAR 15.404-1(d)(2)(ii). The offeror's cost/price proposal will be evaluated by using the PC. The offeror's proposed estimated costs for the basic effort and proposed target price, ceiling price, and share ratio for the optional effort shall not be controlling for source selection purposes. PC shall be determined and measured as the Government estimate of anticipated performance.

(1.3) The PC will include any additional costs deemed necessary for performance under the contract such as, but not limited to award fee, target profit, Government-Furnished Property (GFP), Government facilities, and may include risk mitigation costs applicable to any proposal risk subfactor rated other than "low". In addition, the PC will include the Government's estimate of any cost impacts resulting from demands imposed by the sensor on spacecraft performance, for example, resulting from sensor-unique accommodation issues.

(1.4) The burden of proof regarding cost credibility rests with the offeror. Proposal risk will be increased in any offer determined unrealistically low compared to the anticipated costs of performance and without reasonable and complete explanation. In this case, the Government will assume the offeror does not have an understanding of the technical requirements of the corresponding mission capability subfactor(s). Evaluators may factor this assumption into the PC determination.

(2) Reasonableness. Reasonableness of an offeror's proposal will be evaluated using one or more price analysis techniques described in FAR Subpart 15.404-1(b). If the Contracting Officer determines that Adequate Price Competition (APC) has not been obtained, reasonableness will be evaluated using cost analysis techniques described in FAR Subpart 15.404-1(c).

(3) Reserved.

(4) Other Factors.

(4.1) Compliance with Near Term Funding Profile. Offeror’s proposed cost will be evaluated to ensure that it substantially complies cumulatively with the near term funding profile (FY02-07 TY$ at Threshold Only). Any exceptions need to be adequately justified.

(4.2) Reconciliation of LCCE. The LCCE shall be evaluated to ensure that all differences between the cost proposal and the LCCE are reconcilable and substantiated and that appropriation types required and timing are consistent with DoD and DOC funding policy. If an alternate non-standard funding policy is also proposed, then the explanation of the non-standard funding approach and other exceptions to funding policy are fully substantiated and defendable. The offer shall not be contingent on acceptance of the alternate funding approach.

L&M-524-1 — COST — PROPOSAL VOLUME 4 — VOLUME INSTRUCTIONS

Section 1 – Introduction. This section shall include a Table of Contents, specifying, by page number, where each cost/price format and each piece of narrative data is located.

Section 2 – Cost Information.

(2.1) Cost Formats.

(2.1.1) Overview. The cost/price volume proposal overview shall provide comprehensive narrative support for the cost/price proposal volume. The narrative shall explain the philosophy and methodology used in developing the estimates along with appropriate historical cost data illustrations, labor categories and hours.

(2.1.2) Estimating Methodology. The offeror shall—

(a) Provide a summary description of the standard estimating system or methods. The summary description shall cover separately each major cost element (e.g., Direct Material, Engineering Labor, Manufacturing Labor, Indirect Costs, Other Direct Costs, Overhead, G&A, etc.) unless a parametric model was used that does not provide this level of data. If a parametric model was used, provide a description of the model and the input parameters required. Also, identify any deviations from standard estimating procedures in preparing this proposal volume. Indicate whether the Government has approved the estimating system and /or parametric model and, if so, provide evidence of such approval.

(b) Provide a summary description of the proposed purchasing system or methods (e.g., how material requirements are determined, how sources are selected, when firm quotes are obtained, what provision is made to ensure quantity and other discounts). Also, identify any deviations from standard procedures employed in preparing this proposal. Indicate whether the Government has approved the purchasing system and if so, provide evidence of such approval.

(c) Indicate whether the Government has approved the accounting system, and, if so, provide evidence of such approval. Also, identify any deviations from standard procedures used in preparing this proposal.

(d) If estimated costs required to perform the proposed effort have been decreased due to a management-directed reduction, provide a summary of the reduction by major cost element summary and complete rationale for the reduction.

(2.2) Information Other than Cost or Pricing Data. The offeror shall—

(2.2.1) Provide then-year-funding requirements by Government fiscal year by appropriation, supported by quarterly projections of expenditures, commitments, and termination expenses.

(2.2.2) Provide a cost summary for the instant contract by major cost elements by CLINs for each FY. The offeror also shall include a cost summary sheet that totals all CLINs by Government FY (see sample at Table L&M-xxx (Cost Summary by CLIN by Fiscal Year)).

(2.2.3) Submit a CWBS summary schedule in the example shown at Table L&M-xxx (CWBS Summary Schedule). In the first column, "CWBS No.", insert the proposed CWBS to correspond to the elements of cost stated in the "Description" column. The CWBS number shall be the highest level CWBS that will permit a meaningful analysis (minimum level as described in Section L Annex A -- WBS). Provide summations to all higher CWBS levels. All hours shown in this table shall be consistent with hours stated in the cost summary. The offeror also shall provide relevant documentation to explain the rational for proposed labor and Other Direct Costs. This documentation shall include but is not limited to un-priced BOE sheets and the proposed labor skill mix.

(2.2.4) Provide a Basis of Estimate containing relevant documentation for both prime offeror and subcontractor effort which shall explain the rational for the proposed labor and other direct costs. The offeror shall describe in general terms how the hour estimate for each CWBS element was developed. The offeror shall specify the type of data used to develop the estimate, i.e., historical experience from XYZ program, why that program was relevant, engineering judgment, and cost estimating relationships (CERs, etc.). The offeror shall include an identification and brief description of each CWBS element. The offeror shall also include for each CWBS element a skill mix identification and position description for both prime and subcontractor effort. (See example for BOE Labor Skill Mix at Table L&M-xxx (BOE Labor Skill Mix)).

Table L&M-xxx — BOE Labor Skill Mix *(Sample)*

Skill Mix	CWBS No.	Hours
Senior Engineer		2,000
Lead Engineer		4,050
Technician		950
Total Hours		7,000

(2.2.5) Submit a listing of the proposed probable subcontractors and inter-divisional transfers showing (a) the supplier, (b) description of effort, (c) type of contract, (d) price and hours proposed by each, and (e) price and hours included in prime's proposal to the Government (see example at Table L&M-xxx (Schedule of Probable Subcontractors)).

(2.2.6) Submit by CWBS element a listing of each major material item with an extended value exceeding $100,000 showing nomenclature, part number, quantity required, unit price, and extended price. (See example at Table L&M-xxx (Schedule of Major Material Items)). Identify if item is part of prime contract or subcontract.

Table L&M-xxx —Schedule of Probable Subcontractors *(Sample)*

SUPPLIER	DESCRIPTION OF EFFORT	TYPE CONTRACT	SUBS HRS	SUBS PRICE	PROP HRS	PROP PRICE
TOTALS						

Table L&M-xxx — Schedule Of Major Material Items *(Sample)*

CWBS No.	NOMENCLATURE	PART NUMBER	QTY REQ'D	UNIT PRICE	TOTAL PRICE
	TOTALS				

(2.2.7) Provide a schedule of rates—

(a) Submit a schedule showing proposed direct and indirect rates by year. This schedule is to include (but separately identify) offeror, subcontractor(s) and inter-divisional transfer(s) rates. Note, if subcontractor cost proposals or inter-divisional rates are not available to the offeror, the offeror shall have this data sent directly to the Contracting Officer by the proposal deadline and reference this solicitation number (see example at Table L&M-xxx (Schedule of Rates)).

(b) Submit data to support all indirect rates used in calculating the proposed costs. Each offeror shall indicate whether the proposed indirect rates are those negotiated under a Forward Pricing Rate Agreement (FPRA). If the offeror has a current FPRA and has proposed rates other than the FPRA rates, the offeror shall identify the proposed rate versus the FPRA rate and state the estimated total cost difference. In addition, each offeror shall explain the method and basis of allocation for each rate.

(2.2.8) Submit an electronically encoded cost/price model in support of the proposed price. The

cost/price model submitted must be consistent with the offeror's approved estimating system and must duplicate the logic and mathematical formula reflected in the paper copy of the proposal. Data file(s) shall be in .XLS file format (MS Excel, Release 5.0 or later) or compatible format. Cost/price models submitted shall comply with this section. PDR LCCE model may be acceptable.

Section 3 – Other Information. The offeror shall provide any other relevant cost assumptions and information, which form the basis of its proposal. These cost assumptions and information include, but are not limited to, the use of Government-furnished property, Government-furnished equipment, advance procurement costs, termination costs, inflation rate summary and explanation, special tooling, special test equipment, and any offer to commit or invest the offeror's resources to reduce the cost of the contract that is funded by the Government. The offeror shall list any exception or qualification it has taken to the ground rules and assumptions provided in the solicitation, and provide complete rationale. Additionally, the offeror shall propose ODC as a percentage of the annual I&A Studies budget amount. For example: (i.e. 10% * (15K*$100/hour)=ODC).

Section 4 – Preliminary Design Review (PDR) Life-Cycle cost Estimate (LCCE). The offeror shall submit a PDR LCCE in offeror format that is consistent with the proposed technical baseline and submit a basis of estimate/methodologies used for the PDR LCCE. The Government will provide a list of the government's ground rules and assumptions, which may be referenced here. A listing of any additional Ground Rules and Assumptions used by the offeror will also be provided. The government will provide a Summary WBS & Dictionary and may be referenced in the LCCE. The offeror shall provide a lower level WBS & Dictionary of all estimate accounts for entire scope of the NPOESS, including GFE, in accordance with estimating guidance. For any Government-furnished resources proposed by the offeror, the offeror shall describe the basis for assuming the availability of those resources, estimate the marginal cost of using such resources, and propose alternate sources to be used if the resources are not provided, and the cost of these alternate sources. The offeror shall provide justification if the estimate exceeds the CAIV targets (BY$02 Threshold) or if the proposed contract funding requirements exceed the cumulative budget profile (TY$ Threshold) shown in the figures below. The LCCE estimate relative to the CAIV objectives shall be evaluated consistent with the Consolidated NPOESS EDR Prioritization List at Table L&M-xxx.

Table L&M-xxx — Total Program CAIV Targets

BY02$M	Threshold	Objective
O&S 04-18	**955**	**955**
Acquisition	**3,341**	**3,133**
Excluded: Government Program Office		

Table L&M-xxx — Cumulative Funding Profile

TY$M	FY02	FY03	FY04	F05	FY06	FY07	FY08	FY09
Threshold	68	446	942	1413	1930	2504	2885	3238
Objective	60	415	884	1331	1822	2368	2732	3070
Excludes: Government Program Office								
Standard Launch Services					*75*		*75*	*75*

Table L&M-xxx — CWBS Summary Schedule *(Sample)*						
CWBS NO.	**DESCRIPTION**	**FYXX**	**FYXX**	**FYXX**	**etc.**	**TOTALS**
X.X	Sensor Suite					
	Prime Hours					
	Sub 1 Hours					
	Sub n Hours					
	Inter-divisional Hours					
	Material - Prime					
	Material - Sub 1					
	Material - Sub n					
	Material - Inter-divisional					
	Total - Prime					
	Total - Sub 1					
	Total - Sub n					
	Total -Inter-divisional					
X.X	EDR Algorithms					
	Prime Hours					
	Sub 1 Hours					
	Sub n Hours					
	Inter-divisional Hours					
	Material - Prime					
	Material - Sub 1					
	Material - Sub n					
	Material - Inter-divisional					
	Total - Prime					
	Total - Sub 1					
	Total - Sub n					
	Total -Inter-divisional					
Etc.	Etc.					
TOTALS						

Table L&M-xxx — Cost Summary by CLIN by Fiscal Year *(Sample)*				
CLIN: XXXX				
COST ELEMENT	**FY01**	**FY02**	**etc.**	**TOTAL**
Prime Hours				
Sub 1 Hours				
Sub n Hours				
Inter-divisional Hours				
Total Hours				
Direct Labor - Prime				
Overhead - Prime				
Material - Prime				
Subcontractor 1				
Subcontractor n				
Inter-divisional				
Other Direct Costs - Prime				
Subtotal				
G&A				
Estimated Cost				
Facility Capital Cost of Money				
Award Fee				
Initial Target Profit				
Total Cost Plus Initial Target Profit/Award Fee				
Ceiling Price				
Material - Subcontractor 1 (non-add)				
Material - Subcontractor n (non-add)				
Material - Inter-divisional (non-add)				

Table L&M-xxx — Schedule of Rates *(Sample)*					
ELEMENTS OF COST (RATE CATEGORIES)	**PRIME 2001**	**PRIME 2002**	**SUB1 2001**	**SUB2 2001**	**IDT 2001**
(all categories of labor such as:)					
LC-1 Program Manager					
LC-2 Program Engineer					
(all indirect rates and profit/fee)					
Material Overhead					
G&A					
Facilities Capital Cost of Money					
Award Fee					
Initial Target Profit					
Ceiling Profit					
Share Ratio - Over Target					
Share Ratio - Under Target					

L&M-526 — PROGRAM RISK MITIGATION ORAL PRESENTATION — PROPOSAL VOLUME 6

(a) Each offeror shall substantiate its designs, and technical and management approaches during a Program Risk Mitigation Oral Presentation which may not exceed ten working days. This presentation includes the material required to be delivered during the NPOESS Program Definition and Risk Reduction Preliminary Design Review and Ground Demonstration Four plus additional system engineering and integration, program plan, management and organization and cost information needed to support the offeror's proposal as outlined in proposal volumes 2 - 5. The presentation shall follow the structure that is outlined in Section L. The offeror may provide additional information that in not contained in the proposal.

(b) The offeror is responsible for planning and scheduling the combined Program Risk Mitigation Oral Presentation/Preliminary Design Review/Ground Demonstration Four.Where the offeror contemplates simultaneous technical, cost, or past performance sessions, it will obtain the concurrence of the contracting officer. The offeror may, and is encouraged to, request and obtain this concurrence before submitting its proposal. The workday shall not exceed 9 hours for each day, inclusive of lunch and breaks. The offeror shall provide the Government a half-hour caucus at least four times a day. The briefing charts used during the combined Program Risk Mitigation Oral Presentation/Preliminary Design Review/Ground Demonstration Four shall be the same charts submitted as proposal volume 6 and shall not be updated prior to presenting the information.

(c) The volume 6 submission shall consist of Power Point slides, without number limitation except that the offeror must be able to present and discuss all of them at its combined Program Risk Mitigation Oral Presentation/Preliminary Design Review/Ground Demonstration Four. Where the offeror intends to provide hands-on, computer simulations, or other modes of presentation, the information to be provided or demonstrated must be graphically summarized in one or more Power Point slides in the volume 6 submission with a notation that the hands-on, computer simulations, or other presentation modes will be provided at the combined Program Risk Mitigation Oral Presentation/Preliminary Design Review/Ground Demonstration Four.

(d) The government will evaluate the Program Risk Mitigation Oral Presentation in its Mission Capability, Past Performance, Proposal Risk, and Cost evaluations. The Program Risk Mitigation Oral Presentation shall be evaluated for overall substantiation of the proposal and the risk mitigation plans that the offeror plans to implement. This includes the data that substantiates the progress-to-date and the offeror's approach to continue progress and mitigation efforts.

L&M-527 — PROPOSAL RISK

(a) There is no separate proposal volume for the Proposal Risk Factor. Information from the other proposal volumes and the Proposal Risk Mitigation Oral Presentation will be used to rate proposal risk. The proposal risk ratings will reflect the Government's assessment of the risk associated with each offeror's approach, using the rating definitions in Table L&M-xxx (Proposal Risk Evaluation Ratings). Proposal Risk is assessed against each of the Mission Capability subfactors.

Table L&M-xxx — Proposal Risk Evaluation Ratings
(assigned at the Mission Capability subfactor level)

Rating	Definition
H	High. Likely to cause significant disruption of schedule, increased cost or degradation of performance. Risk may be unacceptable even with special contractor emphasis and close Government monitoring.
M-H	Moderate-High. In between Moderate and High.
M	Moderate. Can potentially cause some disruption of schedule, increase in cost, or degradation of performance. However, special contractor emphasis and close government monitoring will probably be able to overcome difficulties.
L-M	Low-Moderate. In between Low and Moderate.
L	Low. Has little potential to cause disruption of schedule, increase in cost, or degradation of performance. Normal contractor effort and normal government monitoring will probably be able to overcome difficulties.

Source: AFFARS 5315.___-____ for H, M, and L ratings. M-H and L-M ratings will be used when the Government's evaluation does not provide an unambiguous H, M, or L rating.

L&M-5xx — NPOESS SYSTEM PRIORITIZATION

(a) The most critical NPOESS requirements or key performance parameters (KPPs), namely Category IA EDRs, Data Access, & Interoperability, are to be addressed in accordance with the definition of AFFARS 5315.301-90(o). KPPs are shown in Table L&M-xxx (Consolidated NPOESS EDR Prioritization List). A proposal's failure to satisfy any of such requirements will result in a deficiency, making the proposal unawardable.

(b) For non-KPP performance thresholds, the offerors are provided limited flexibility to propose solutions that may vary from such requirements. The use of the term "threshold performance requirement" or "threshold" in this solicitation and the associated source selection process, including proposal evaluations, does not follow the definitions in AFFARS 5315.301-90(b) and (o). The evaluation requirements, criteria, and process for this evaluation have been structured to provide offerors with flexibility and trade space in their proposed solutions with respect to technical/design trades and Cost-as-an-Independent-Variable (CAIV) considerations. The burden is on the offeror to provide convincing rationale for Government's acceptance of such solutions when an offeror's trades result in performance below threshold or in increased cost.

Table L&M-xxx -— NPOESS Integrated Requirements Priority List (IRPL)

Ranking	Requirements
1	**Category 1A EDRs*, Data Access, & Interoperability**
2	**Data Availability and System Ao**
3	Category IIA EDRs*
4	Category IIB EDRs*
5	Cost
6	ILS (Includes OPS); Flexibility, Expansion, and Robustness (Includes new instruments, new/upgraded algorithms, rapid prototyping, loss of a node, replenishment, field terminal S/W approach, etc.)
7	Category IIIB EDRs*
8	P3I EDRs*

*EDR includes all attributes (including latency) and associated RDRs

(c) Parameters stated as an objective represent the capability or characteristic desired by the user and which the program manager would like to obtain. The definition of "Objective Performance Requirement" is the measurable, desirable capability or characteristic above the threshold and is consistent with the definition at AFFARS 5315.301-90(b). The objective represents an operationally meaningful increment above the Threshold Performance Requirement.

(d) NPOESS EDRs have been divided into two types of categories: Threshold Categories (I, II, and III) and Objective Categories (A and B). Categories I, II, and III determine ranking of threshold requirements. Categories A and B determine relative importance of exceeding thresholds or approaching objectives. EDR characteristics include all attributes (including latency) and associated RDRs. The IPO does not intend to prioritize EDR attributes. These categories are—

Category I-A. Trades addressing performance below TRD Threshold levels will not be accepted. There is definite value to the Government if thresholds are exceeded and objectives are approached.

Category II-A. Achievement of TRD threshold levels is expected, but an offer with trades addressing performance below TRD threshold levels may be acceptable only where the thresholds are significant design or cost drivers and below-threshold performance will provide significant benefit to the Government in the offeror's overall best-value solution (e.g., reduced cost, improved performance in other EDRs, improved spacecraft accommodation, etc.). There is definite value to the Government if thresholds are exceeded and objectives are approached.

Category II-B. Same as Category IIA, except that there is little value to the Government if thresholds are exceeded.

Category III-B. TRD threshold level performance is expected. However, an offer with trades addressing performance below TRD threshold levels may be acceptable and satisfaction of these EDRs should not significantly drive sensor design costs. There is little value to the Government if thresholds are exceeded.

Table L&M-xxx — Consolidated NPOESS EDR Prioritization List

Baseline NPOESS EDRs (55) derived from IORD II, as modified and reflected in latest version on the NPOESS TRD, Appendix D. P3I EDRs not shown. Sensor assignments are "notional" Government allocations. *[p]* = primary contributor; *[aw]* = all weather.

EDR	Cat.	Sensor
Atmospheric Vertical Moisture Profile (KPP)	I-A	CrIS/ATMS[P]/ CMIS*[aw]*
Atmospheric Vertical Temperature Profile (KPP)	I-A	CrIS/ATMS*[p]*
Global Sea Surface Winds (*Speed*) (KPP)	I-A	CMIS
Imagery (KPP)	I-A	VIIRS*[p]*
Sea Surface Temperature (KPP)	I-A	VIIRS
Soil Moisture (KPP)	I-A	CMIS
Aerosol Optical Thickness	II-A	VIIRS
Aerosol Particle Size	II-A	VIIRS
Albedo (*surface*)	II-A	VIIRS
Atmospheric Vertical Temperature Profile	II-A	CMIS*[aw]*
Auroral Boundary	II-A	SESS
Cloud Cover/Layers	II-A	VIIRS
Cloud Effective Particle Size	II-A	VIIRS
Cloud Ice Water Path	II-A	CMIS
Cloud Liquid Water	II-A	CMIS
Cloud Optical Thickness	II-A	VIIRS
Cloud Top Height	II-A	VIIRS
Cloud Top Pressure	II-A	VIIRS
Cloud Top Temperature	II-A	VIIRS
Electric Field	II-A	SESS
Electron Density Profile	II-A	SESS/ GPSOS*[p]*
Geomagnetic Field	II-A	SESS
Global Sea Surface Winds (*Direction*)	II-A	CMIS
Ice Surface Temperature	II-A	VIIRS
Land Surface Temperature	II-A	VIIRS
Ocean Color	II-A	VIIRS
Ocean Wave Characteristics/Significant Wave Height	II-A	Altimeter
Ozone (*Total Column*)	II-A	OMPS
Ozone (*Vertical Profile*)	II-A	OMPS
Precipitable Water/Integrated Water Vapor	II-A	CMIS
Precipitation (*Type/Rate*)	II-A	CMIS
Sea Ice Characterization	II-A	VIIRS*[p]*
Sea Surface Height/Topography	II-A	Altimeter
Sea Surface Temperature	II-A	CMIS*[aw]*
Snow Cover/Depth	II-A	VIIRS*[p]*
Surface Type	II-A	VIIRS
Active Fires *(Application of Surface Type)*	II-B	VIIRS
Suspended Matter	II-A	VIIRS
Total Water Content	II-A	CMIS
Vegetation Index	II-A	VIIRS
Aerosol Optical Thickness	II-B	APS
Aerosol Particle Size	II-B	APS
Aerosol Refractive Index, SSA, and Shape	II-B	APS (*aerosol)*
Auroral Energy Deposition	II-B	SESS
Cloud Particle Size Distribution	II-B	APS *(aerosol)*
Downward Long-wave Radiation (surface)	II-B	ERBE
Downward Short-wave Radiation (surface)	II-B	ERBE
Energetic Ions	II-B	SESS
Ice Surface Temperature	II-B	CMIS*[aw]*
Land Surface Temperature	II-B	CMIS*[aw]*
Medium Energy Charged Particles	II-B	SESS
Net Solar Radiation (TOA)	II-B	ERBE
Neutral Density Profile	II-B	SESS
Outgoing Long-wave Radiation (TOA)	II-B	ERBE
Precipitable Water/ Integrated Water Vapor	II-B	VIIRS
Sea Ice Characterization	II-B	CMIS*[aw]*
Solar Irradiance	II-B	TSIS
Supra-thermal to Auroral Energy Particles	II-B	SESS
Auroral Imagery	III-B	SESS
Cloud Base Height	III-B	VIIRS/CMIS
Global Sea Surface Wind Stress	III-B	CMIS
Imagery	III-B	CMIS*[aw]*
In-situ Plasma Fluctuations	III-B	SESS
In-situ Plasma Temperature	III-B	SESS
Ionospheric Scintillation	III-B	SESS/ GPSOS*[p]*
Net Heat Flux	III-B	VIIRS
Pressure (*Surface/Profile*)	III-B	CrIS/ATMS*/* CMIS
Snow Cover/Depth	III-B	CMIS*[aw]*
Surface Type	III-B	CMIS

L&M-5xx — CROSS-REFERENCE MATRIX

The Cross-Reference Matrix is intended to reduce internal RFP inconsistencies and facilitate proposal preparation and evaluation. In the event any conflict is found to exist between this matrix and any other element of the solicitation, the other element of the solicitation shall have precedence. The offeror is responsible for completing the matrix and including it with the technical proposal volume. The offeror may revise the matrix format and/or add columns, as long as the data in the required columns is supplied. The Government will use the completed matrix to verify that the IMP tasks address all of the requirements of the TRD and CDRL (Exhibit A). The matrix also will be used to evaluate the adequacy of the proposed Contract WBS. The example format is shown in Table L&M-xxx (Cross-Reference Matrix)).

Table L&M-xxx — Cross-Reference Matrix (sample)

TRD	System Spec	Segment Spec	SOO	RFP L/M	WBS	CWBS	IMP	CLIN	CDRL
1.1			1.0	1.1					
1.2			2.0	1.0 1.1					
3.1.2			3.0	1.2.1 1.2.2 1.2.3 1.2.5 1.3. 1.4.2 1.5					
3.1.6			4.0	1.1 1.2.1 1.3 3.0					
3.2.1			5.0	1.1 3.0					
3.3			6.0	1.4 1.4.2					

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Annex A to Section L-M
F04701-02-R-XXXX

NPOESS Work Breakdown Structure (WBS)

NATIONAL POLAR-ORBITING OPERATIONAL ENVIRONMENTAL SATELLITE SYSTEM (NPOESS)

date

THIS ANNEX, INCLUDING THE
COVER, CONSISTS OF X PAGES

Purpose

The following is a Work Breakdown Structure (WBS) for the entire NPOESS program. It covers all efforts potentially required to meet the program objectives throughout the program lifecycle. The lifecycle for the NPOESS program begins at Milestone I, March 1997 and runs through the end of the mission life as defined in the Integrated Operational Requirements Document (IORD) and the Technical Requirements Document (TRD). This approximately 20 year period, from 1997 to 2018, includes effort performed on multiple contracts. Each contract contributes to one or more parts of the overall program WBS. Under the Total System Performance Responsibility (TSPR) concept, the TSPR contract includes effort in most of these WBS elements. To simplify accounting, two elements have been created which specifically exclude TSPR contractor effort. These are the Launch Segment, WBS 1.1, and the Government Program Office, WBS 1.15. TSPR contributions to launch support are included primarily in the Flight Support Operations and Services (FSOS), WBS 1.10. The remaining elements describe additional efforts that may be required to achieve the NPOESS program objectives.

The WBS allows the Government and TSPR offeror to organize their estimates under a common structure. When extending the WBS into a Contract WBS (CWBS), the TSPR effort shall be allocated in accordance with the definitions contained herein. It is not required that the CWBS include the full range of efforts described in the definitions nor that it extend from all WBS elements. Depending on the system architecture proposed, some elements may not be necessary to achieve program objectives. Similarly, elements may contain effort that will be provided by the Government. The CWBS shall extend only below the provided elements. Equipment, services, support, or other resources exclusively provided by the Government are labeled Government Furnished (GF).

Work Breakdown Structure (WBS)

1 National Polar-orbiting Operational Environmental Satellite System (NPOESS)

- 1.1 Launch Vehicle Segment (GF)
  - 1.1.1 Launch Vehicle Services (GF)
  - 1.1.2 Mission Unique Integration (GF)
- 1.2 Space Segment
  - 1.2.1 Satellite Assembly, Integration & Test
  - 1.2.2 Spacecraft
  - 1.2.3 Payload
    - 1.2.3.1 VIIRS
    - 1.2.3.2 CMIS
    - 1.2.3.3 CrIS
    - 1.2.3.4 ATMS
    - 1.2.3.5 OMPS
    - 1.2.3.6 GPSOS
    - 1.2.3.7 ADCS (GF)
    - 1.2.3.8 SARSAT (GF)
    - 1.2.3.n Other Payloads
- 1.3 Command, Control & Communications Segment (C^3S)
- 1.4 Interface Data Processing Segment (IDPS)
- 1.5 Systems Engineering/Program Management (SE/PM) & Data
- 1.6 System Test & Evaluation
- 1.7 Systems Training
- 1.8 Peculiar Support Equipment (PSE)
- 1.9 Common Support Equipment (CSE)
- 1.10 Flight Support Operations & Services (FSOS)
  - 1.10.1 Mission Unique Integration
  - 1.10.2 Mate, Checkout, and Launch
  - 1.10.3 On-Orbit Support and Operations
- 1.11 Storage
- 1.12 Industrial Facilities
- 1.13 Initial Spares & Repair Parts
- 1.14 Operations & Support (O&S)
- 1.15 U.S. Government Program Office (GPO) Support (GF)
- 1.16 Field Terminal Segment

1 National Polar-orbiting Operational Environmental Satellite System (NPOESS)

This refers to the hardware, software, data, services, and facilities required to attain and/or maintain NPOESS. NPOESS includes launch vehicles, satellites, communications, command and control, processing facilities and equipment, mission integration, and other mission equipment and personnel necessary to provide and sustain an operational capability in space. Specifically, the NPOESS is a joint agency program combining the capabilities of the DoD DMSP and DOC POES operational space systems into a single converged system. The program will be required to provide, for approximately a decade, a remote sensing capability to acquire, receive (at ground terminals), and disseminate (to processing centers), global and regional data. These data include cloud cover imagery as well as other specialized meteorological, climatic, terrestrial, oceanographic, and solar-geophysical data. The goal of the converged program is to reduce the cost of acquiring and operating the U.S. polar-orbiting environmental satellite systems, while continuing to satisfy United States operational civil and national security requirements. It is anticipated that operational data will be collected with a variety of sensors to provide both civil and military environmental data.

1.1 Launch Segment (Government Furnished)

This segment includes all costs to procure the launch vehicle, integrate the satellite (s) with a launch vehicle, and launch the satellite into the required orbit. NPOESS satellites are designed to be compatible with the Evolved Expendable Launch Vehicle. This segment also includes costs for launch services which include the organization, maintenance and management of launch vehicle facilities and mission equipment, launch base support and flight support operation for the launch vehicle. Other flight support operation costs are assigned under WBS element 1.10. Flight Support Operations & Services.

1.1.1 Launch Vehicle Services (Government Furnished)

This element refers to the materials and services provided by the Launch Vehicle Contractor (LVC) that are needed to place the NPOESS satellite into orbit using the MLV class of the EELV boosters. Launch vehicle services includes all processing operations, standard payload integration, and launch. Standard payload integration is defined per the EELV Program Standard Interface Specification and provides a pre-defined envelope of basic interfaces and services.

1.1.2 Mission Unique Integration (Government Furnished)

This element refers to the services provided by the LVC to accomplish first launch LV/SV mission unique integration (MUI). MUI normally occurs only on the first launch but may be required for subsequent launches due to mission, spacecraft, or payload changes that could impact the booster, payload interface, or launch site facilities. The scope varies greatly and can impact any or all LV systems: structural, electrical, or mechanical elements.

1.2 Space Segment

This Segment includes recurring and nonrecurring costs of all components for risk reduction, design, qualification, and production of the completed satellite ready for shipment to launch site or storage. The major components of the space segment are satellite integration, assembly & test, spacecraft bus, IPO-developed sensors, leveraged payloads, and Government furnished (GF) payloads. The functions of the space segment are to sense and collect data, receive and execute commands from the C3 segment, transmit stored mission data to the C3 segment, and transmit high rate and low rate data to external field terminal collection paltforms.

1.2.1 Satellite Integration, Assembly, and Test (IAT)

This element refers to all satellite efforts associated with the design, development, and production of mating surfaces, structures, equipment, parts, materials, and software required to assemble associated level 3 WBS elements into level 2 mission equipment (hardware/software) as a whole and not directly part of any other individual level 3 element. IAT includes all efforts associated with the following: (a) The development of engineering layouts and determination of overall design characteristics; (b) The set up, conduct and review of testing assembled components or subsystems prior to installation; (c) The detailed production design, producibility engineering planning (PEP), and manufacturing process capability, including the process design development and demonstration effort to achieve compatibility with engineering requirements and the ability to produce economically and with consistent quality; (d) Inspection activities related to receiving, factory and vendor liaison; (e) Design maintenance effort; (f) Quality planning and control; (g) Tooling (initial production facilities, factory support equipment) including its planning, design and fabrication; (h) Administrative engineering; (I) The joining or mating and final assembly of level 3 equipment elements to form a complete prime mission equipment when the element is performed at the manufacturing facility; (j) Integration of software (including the loading and verification of firmware); and, (k) The conduct of production acceptance testing. This IAT element also includes all spacecraft testing chambers (vacuum, shock, thermal, etc.) and costs associated with systems engineering activities related to the integration of spacecraft bus subsystems. The IAT element excludes all system engineering/program management/data (SE/PM/Data) and system test and evaluation (ST&E) associated with the overall system.

1.2.2 Spacecraft

The spacecraft element refers to the principle operating space vehicle which serves as a housing or platform for carrying a payload and other mission-oriented equipment in space. This element includes, for example, structure, power, attitude determination and control, and other equipment characteristic of a spacecraft bus. It also includes all design, development, and production, and assembly efforts to provide the spacecraft bus as an entity.

1.2.3 Payload

The payload element refers to that equipment provided for special purposes in addition to the normal equipment integral to the spacecraft bus. It includes, for example, the sensor suite placed on board the vehicle, communications, instrumentation, telemetry equipment and other mechanisms that are specifically mission-oriented to collect data for future planning and projection purposes. Typical hardware normally includes, for example, associated multiple detector elements, calibration devices, sensor system electronics, sensor housing/equipment, and other sensor subsystems. This element includes software intrinsic to specific sensors, along with the design, development, production, and assembly efforts for each sensor. This element also includes costs associated with systems engineering efforts to integrate payload sensors in regard to field of vision analyses, bus impacts, and electromagnetic interference. All effort directly associated with the integration, assembly, test and checkout of these elements into the space segment is excluded.

1.2.3.1 Visible Infrared Imager Radiometer Suite (VIIRS)

This element refers to the design, development, and production of all hardware and flight software components of the VIIRS to include any engineering development, protoflight, and production units. It includes the design, fabrication, assembly, and test of individual hardware and flight software components and/or modules plus the integration, assembly and test efforts required to produce fully integrated and tested sensor suite units. All necessary efforts to

develop, produce, and test the required sensor algorithms are also included along with the activities associated with all required special test equipment, special tooling, production planning, systems engineering, and program management.

1.2.3.2 Conical Microwave Imager Suite (CMIS)

This element refers to the design, development, and production of all hardware and flight software components for complete units of the CMIS to include any engineering development, protoflight, and production units. It includes the design, fabrication, assembly, and test of individual hardware and flight software components and/or modules plus the integration, assembly and test efforts required to produce fully integrated and tested sensor suite units. All necessary efforts to develop, produce, and test the required sensor algorithms are also included along with the activities associated with all required special test equipment, special tooling, production planning, systems engineering, and program management.

1.2.3.3 Cross-Track IR Sounder (CrIS)

This element refers to the design, development, and production of all hardware and flight software components for complete units of the CrIS to include any engineering development, protoflight, and production units. It includes the design, fabrication, assembly, and test of individual hardware and flight software components and/or modules plus the integration, assembly and test efforts required to produce fully integrated and tested sensor suite units. All necessary efforts to develop, produce, and test the required sensor algorithms are also included along with the activities associated with all required special test equipment, special tooling, production planning, systems engineering, and program management.

1.2.3.4 Advanced Technology Microwave Sounder (ATMS)

This element refers to the design, development, and production of all hardware and flight software components for complete units of the ATMS to include any engineering development, protoflight, and production units. Design and development specifically refers to unique efforts that may be required for Flight Unit #2 and beyond. Design, development and production of Flight Unit #1 are Government Furnished. It includes the design, fabrication, assembly, and test of individual hardware and flight software components and/or modules plus the integration, assembly and test efforts required to produce fully integrated and tested sensor suite units. All necessary efforts to develop, produce, and test the required sensor algorithms are also included along with the activities associated with all required special test equipment, special tooling, production planning, systems engineering, and program management.

1.2.3.5 Ozone Mapper and Profiler Suite (OMPS)

This element refers to the design, development, and production of all hardware and flight software components for complete units of the OMPS to include any engineering development, protoflight, and production units. It includes the design, fabrication, assembly, and test of individual hardware and flight software components and/or modules plus the integration, assembly and test efforts required to produce fully integrated and tested sensor suite units. All necessary efforts to develop, produce, and test the required sensor algorithms are also included along with the activities associated with all required special test equipment, special tooling, production planning, systems engineering, and program management.

1.2.3.6 Global Positioning System Occultation Suite (GPSOS)

This element refers to the design, development, and production of all hardware and flight software components for complete units of the GPSOS to include any engineering development, protoflight, and production units. It includes the design, fabrication, assembly, and test of

individual hardware and flight software components and/or modules plus the integration, assembly and test efforts required to produce fully integrated and tested sensor suite units. All necessary efforts to develop, produce, and test the required sensor algorithms are also included along with the activities associated with all required special test equipment, special tooling, production planning, systems engineering, and program management.

1.2.3.7 ADCS (Government Furnished)

This element is the Advanced Data Collection System (ADCS) transponder (e.g., ARGOS-3) which is provided as GF (with the exception of the antennas and cables). The ARGOS system is an international surface data collection system that is managed by France.

1.2.3.8 SARSAT (Government Furnished)

This element is the Search and Rescue Satellite Aided Tracking (SARSAT) instruments that are provided as GF (with the exception of the antennas). The SARSAT system is part of the COSPAS-SARSAT international search and rescue system that is managed by representatives of the U.S., Canada, France, and Russia. The SARSAT beacons and LUTs will be supplied, implemented, operated, and maintained by local authorities.

1.2.3.n Other Payloads

This element refers to the design, development, and production of all hardware and flight software components for complete units of any additional payloads that will be procured and or modified to satisfy NPOESS requirements to include any engineering development, protoflight, and production units. It includes the design, fabrication, assembly, and test of individual hardware and flight software components and/or modules plus the integration, assembly and test efforts required to produce fully integrated and tested sensor suite units. All necessary efforts to develop, produce, and test the required sensor algorithms are also included along with the activities associated with all required special test equipment, special tooling, production planning, systems engineering, and program management.

1.3 Command, Control, and Communications Segment (C3S)

Includes all hardware and software required for command and control, data routing and retrieval, satellite simulation and the C3 segment level integration, assembly and test. The functions of the C3S are to transfer commands from the mission management centers to the satellite; to receive telemetry data from the satellite and transfer such data to the mission management centers; to receive stored mission data from the satellite and transfer it to the IDPS; to provide voice communications between the elements of the C3S; and to provide a mechanism for on-orbit satellite test and evaluation. The C3S includes costs for the ground hardware/software equipment used to communicate between control and tracking facilities, monitor the health and status of satellites, command the satellite's hardware and adjust the satellite's orbit as required for health or mission purposes and provide for overall enterprise management. Recurring costs to operate and sustain the C3S are included in WBS 1.14 Operations & Support. Also includes the Flight Vehicle Simulator consisting of hardware and software elements that provide a high-fidelity dynamic simulation of all spacecraft subsystems and mission sensors.

1.4 Interface Data Processing Segment (IDPS)

Provides for processing of mission data. The functions of the IDPS are to ingest data transferred from the C^3 Segment (global, multispectral cloud data and other specialized meteorological, oceanographic and solar-geophysical data); process these data into environmental products, and make them available to national environmental and weather centers. IDPS includes costs for the ground hardware/software equipment used for data processing along with segment level

integration, assembly, test, configuration management and algorithm development capability. Processing for field terminals is covered in WBS 1.16. Recurring costs to operate and sustain the IDPS are included in WBS 1.14 Operations & Support.

1.5 System Engineering/Program Management/Data Segment

This segment is defined as the systems engineering, system integration, configuration management and business management of all segments of the NPOESS system. SE/PM encompasses the overall planning, directing, and controlling of the definition, development, and production of the NPOESS system and major segments, including logistics engineering and management. SE/PM/Data effort that can be associated specifically with the equipment (hardware/software) element, e.g., spacecraft bus, payload, etc., is excluded. This segment also includes costs associated with the contractor production of government-required documentation. Excludes Government Program Office costs, which are included in WBS 1.15.

1.6 Systems Test and Evaluation

This element includes Developmental Test and Evaluation (DT&E), Operational Test and Evaluation (OT&E), and Combined Test and Evaluation. DT&E is conducted to demonstrate that the engineering design and development process is complete, that design risks have been minimized, and that the integrity of the segment interfaces and the overall system design and performance is ensured. The tests will include both functional and environmental tests. The purpose of OT&E is to verify that NPOESS is operationally effective and suitable. OT&E is conducted by AFOTEC and supported by the EMD/Production contractor. OT&E will ensure that NPOESS will meet or exceed operational performance requirements. The Initial Operational Test and Evaluation (IOT&E) will assess the operational effectiveness and suitability of the NPOESS and provide feedback on operational issues and capabilities. OT&E will be conducted incrementally to provide an early assessment of operational capability. Combined Testing is defined as simultaneous testing conducted by the development and operational testers when cost, schedule, or test item availability dictates that they must share test facilities, resources, and data. NPOESS will utilize combined testing to the fullest extent possible in order to reduce costs and the time required to conduct all necessary testing. Events, staffing and activities for all segments are defined in the NPOESS TEMP.

1.7 Systems Training

System training is defined as the training services, devices, accessories, aids, equipment, and parts used to facilitate instruction through which personnel will acquire sufficient concepts and skills to operate and maintain the system with maximum efficiency. System Training includes all effort associated with the design, development, and production of deliverable training equipment as well as the execution of initial training services. System Training excludes the overall planning, management, and task analysis function inherent in WBS 1.5 SE/PM/Data.

1.8 Peculiar Support Equipment (PSE)

Includes the design, development, and production of those deliverable items and associated software required to support and maintain the NPOESS while not directly engaged in the performance of its mission, and which have application peculiar to a given material item. PSE includes, for example, vehicles, equipment, tools, etc., used to fuel, service, transport, hoist, repair, overhaul, assemble, disassemble, test, inspect, or otherwise maintain the mission equipment. It also includes any production of duplicate or modified factory test or tooling equipment delivered to the USG for use in maintaining the system (factory test and tooling equipment initially used by the contractor in the production process but subsequently delivered to the USG will be included as cost of the item produced). It also includes any additional equipment or software that will be required to maintain or modify the software portions of the

system. PSE specifically excludes the overall planning, management and task analysis functions inherent in the work breakdown structure element systems engineering /program management, and the common support equipment presently in the USG inventory or commercially common within industry which is bought by the using activity and not by the program office.

1.9 Common Support Equipment (CSE)

Refers to those items required to support and maintain the system or portions of the system while not directly engaged in the performance of its mission, and which are presently in inventory for the support of other systems. CSE includes all efforts required to assure the availability of this equipment for support of the particular material item. CSE also includes the acquisition of additional quantities of this equipment if caused by the introduction of the material item into operational service.

1.10 Flight Support Operations & Service (FSOS)

The flight operations and orbital checkout support element refers to the personnel and material required to operate individual mission control centers and to perform ground command and control associated with the spacecraft bus and payloads during the launch phase. It also includes effort and materials to conduct equipment receiving and checkout at the launch site, pre- and post-flight data reduction and analysis, any pre launch flight control/mission control planning for the spacecraft bus and payloads. In addition, this element covers those required activities performed at the primary contractor facility, the satellite operations center and other locations as assigned to process the NPOESS spacecraft bus and payloads either from factory shipment or removal from storage to launch. The launch support period begins at either the spacecraft's departure from the contractor facility, or its removal from storage, goes through lift off and ends with the completion of post launch activities and early orbit support. This segment also includes the preflight operations and services both subsequent to production and/or storage and during launch of the spacecraft bus and payloads plus launch support element, e.g., payload processing facilities, real property installed equipment and aerospace ground equipment not included in WBS 1.1 Launch Segment. This element excludes calibration/validation, which will be included in WBS 1.6.

1.10.1 Mission Unique Integration

This element refers to functions performed by the SVC to accomplish LV/SV mission unique integration (MUI). MUI normally occurs only on the first launch but may be required for subsequent launches due to mission, spacecraft, or payload changes that could impact the booster, payload interface, or launch site facilities. The scope varies greatly and can impact any or all SV and/or LV systems.

1.10.2 Mate, Checkout & Launch

This element refers to the standard recurring SV receipt, inspection, test, integration and mate, integrated testing, and launch support services performed by the Satellite Vehicle Contractor(s) (SVC) at the launch site.

1.10.3 On-orbit Support

The flight support operations and orbital checkout refers to the personnel and material at the primary contractor facility, the satellite operations center and other locations required to perform ground command and control associated with the spacecraft bus and payloads during the launch processing and post-launch orbit insertion. It excludes pre-launch and launch activities at the launch site. Flight support operations begins with the spacecraft's departure from the contractor facility and ends after the spacecraft and payloads have been verified operational ready.

1.11 Storage

Storage refers to those activities required to hold portions of the spacecraft bus and payloads while awaiting use of the system. These periods of holding include those resulting from schedule changes and/or technical problems exogenous to the portion of the spacecraft bus and payloads being stored, prepared for storage, or recovered from storage. This item also includes relocating the spacecraft bus and payloads from one storage area to another storage area when necessitated by mission requirements.

1.12 Industrial Facilities

Refers to the construction, conversion or expansion of industrial facilities for production, inventory and contractor depot maintenance required when that service is for the specific system; real estate and preparation of system peculiar industrial facilities for production, inventory, depot maintenance and other related activities; production equipment acquisition, modernization or transferal of equipment for the particular system (pertains to government owned and leased equipment under facilities contract). This element also includes industrial facilities for hazardous waste management to satisfy environmental standards.

1.13 Initial Spares & Repair Parts

This segment includes the purchase of components, assemblies and subassemblies used for initial replacement purposes in the Space, C^3S, and IDPS equipment end items. It also includes repairable spares and spare parts required as initial stock to support and maintain the fielded system or systems during the first year **after IOC.** It does not include the purchase of entire instruments, sensor suites or other major subsystems.

1.14 Operations & Support

Includes the recurring costs for the personnel, material and services required to operate and maintain all operational segments of the NPOESS system. The following phases apply to O&S for all segments:

Phase 1 – Initial contractor O&S from completion of segment testing for NPP components through IOC.
Phase 2 – Government and Contractor O&S not earlier than IOC through the end of the program.

1.15 US Government Program Office (Government Furnished)

This element includes the NPOESS Integrated Program Office under the direction of a System Program Director (SPD) that will carry out the program or project. This involves the business and administrative planning, organizing, directing, coordinating, controlling, and approval actions designated to accomplish overall program objectives.

1.16 Field Terminal Segment

This element provides for Raw Data Record (RDR) and Environmental Data Record (EDR) processing at High Rate Data and Low Rate Data User Field Terminals. The functions of the Field Terminal Segment are (1) to accept Intermediate Frequency (IF) data from the User Field Terminal Antenna and Radio Frequency (RF) equipment, (2) to process these data into RDRs and EDRs, and (3) to transfer the processed data to the User Field Terminal. NPOESS field terminals will be located around the world in fixed and mobile configurations. A notional field terminal is composed of an antenna with associated RF gear, a receiver, a front-end processor (which will run the NPOESS provided IDPS software), and a database management system; all of these functions are similar to those of the Central user element. The Field Terminal Segment includes costs for field terminal unique software only. NPOESS will develop hardware

requirement and interface specifications, but equipment purchase is the responsibility of the user. Recurring software maintenance costs are included in WBS 1.14 Operations & Support. First time training on each of the terminal types is included in WBS 1.7, System Training.

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Annex B to Section L
F04701-02-R-XXXX

NPOESS

INTEGRATED MASTER PLAN (IMP) and INTEGRATED MASTER SCHEDULE (IMS) INSTRUCTIONS

NATIONAL POLAR-ORBITING OPERATIONAL ENVIRONMENTAL SATELLITE SYSTEM (NPOESS)

Date

THIS ANNEX, INCLUDING THE
COVER, CONSISTS OF xx PAGES

1.0 GROUND RULES AND ASSUMPTIONS –

The offeror's Integrated Master Plan (IMP) shall comply with the following ground rules and assumptions:

1) The EMD Production Schedule dates for the proposal are to be based on the National Launch Forecast dated 15 August 01, which reflects the earliest "ready for launch" dates. The government requires NPOESS satellites to be available to backup the launch of the POES N' and DMSP F-20 satellites.

a) A full-up 1330 configuration satellite must be available for a launch call-up in March 2008 (to replace a failed N').

b) If an NPOESS satellite is not required to replace N', by February, 2009, an NPOESS satellite must be made available for a launch call-up to replace a failed DMSP F-20, and must be capable of being reconfigured for launch into any orbit within 180 days as a threshold, with an objective of 90 days. The 180/90 day reconfiguration period includes a notional on-orbit check-out and calibration period of one month.

(Due to the limited availability of spare launch vehicles, the government will not have the capability to provide more than one NPOESS satellite launch prior to the first nominal NPOESS launch date in 2009. Therefore, should POES N' fail prior to the planned launch of DMSP F-20, and the government directs a launch call-up to replace N', the EMD contractor will not be required to also backup F-20.

c) The **nominal** launch dates for C1 through C3, based on the government's projected life expectancy for DMSP and POES, are:

- **C1 2130 April, 2009**
- **C2 1330 June, 2011**
- **C3 1730 April, 2013**

These dates are subject to change and may be revised prior to issuing the EMD RFP.

d) In the event of a launch or on-orbit failure of N', F-20, or any NPOESS satellite, the NPOESS contractor shall be capable of providing an operational replacement satellite configured for the proper orbit no later than 180 days after the failure as a threshold, with an objective of 90 days.

e) The ability to accommodate more than one premature failure (failure of N', F-20, or any NPOESS satellite to achieve expected operational life for any reason) occurring anytime during the NPOESS program mission life shall not be required.

f) For cost proposal purposes, the government requires the EMD contractor to cost a backup satellite for the last planned NPOESS launch, if that launch occurs before June 30, 2018 (TBR).

2) Initial Operational Capability

Initial Operational Capability (IOC) determination is projected to be April, 2013.

3) NPOESS Mission Life

NPOESS program mission life is 10 years and begins when the first capability to launch is achieved, i.e., when an NPOESS satellite is available to back-up the POES N' mission. Further guidance on the duration and start point of the mission life can be found in TRD version 6A.

4) NPP Sensors

a) The delivery of the Flight Qualified Sensors for the NPP is required by November, 2004. The nominal NPP launch date is December, 2005.

b) Significant NPP mission support activities include, but are not limited to:

(1) The delivery of GSE and software for the NPP VIIRS and CrIS sensors is required by 1 October 2004

(2) Support for VIIRS and CrIS instrument integration with the NPP spacecraft is required from 1 Nov 2004 through operations handover from NASA to IPO (nominally NPP launch + 90days).

(3) Support for development of instrument-specific NPP satellite test procedures is required from 6 months prior to instrument EDU availability through completion of on-orbit sensor activation.

(4) Test-validated thermal math models and finite element models of the VIIRS and CrIS instruments are required 1 month prior to instrument delivery or 1 October 2004, whichever is earlier.

5) The delivery date for the OMPS flight unit 1 for the flight of opportunity is May 14, 2004.

6) C3 Readiness

a) Assume floor space becomes available for installation of the C3S equipment at the MMC fifteen months prior to NPP launch.

b) C3S equipment shall be in place and site acceptance testing completed, at least twelve months prior to the launch of the NPP satellite.

c) NPP C3S intersegment testing shall be completed at least 7 months before the NPP launch to support an NPP system operational readiness declaration six months prior to NPP launch.

d) The complete NPOESS C3S at the primary and backup MMCs shall support an operational readiness declaration at least six months prior to the launch of the first NPOESS satellite.

7) IDPS Readiness

a) Assume floor space becomes available for installation of the IPDS equipment at NESDIS/NCEP fifteen months before NPP launch.

b) NPP IDPS equipment shall be in place at the NESDIS Central, and site acceptance testing completed, at least twelve months prior to the launch of the NPP satellite.

c) NPP IDPS intersegment testing shall be completed at least seven months prior to the launch of the NPP satellite to support an NPP system operational readiness declaration six months prior to NPP launch.

d) The IDPS to meet NPOESS requirements shall support an operational readiness declaration at least six months prior to the launch of each NPOESS satellite.

e) NPP IDPS shall be mission ready at AFWA prior to the launch of the NPP satellite.

f) The complete IDPS shall be in place and operational at all Centrals at least three months prior to the launch of each NPOESS satellite.

8) **Operations and Maintenance**

a) The EMD contractor shall be responsible for all NPP Operations and Maintenance commencing at operations handover from NASA to the IPO 90 days after the launch of the NPP satellite.

9) Field Terminals

a) The EMD contractor shall specify the hardware and storage requirements needed to run the IDPS LRD and HRD field terminal software no later than 2007.

2.0 INTEGRATED MANAGEMENT FRAMEWORK (IMF)

The Government is implementing the Integrated Management Framework (IMF) approach for managing the NPOESS EMD program. The IMF approach provides the offeror a product orientation to the management of his effort while providing the Government greater visibility into the proposed efforts. To achieve the product orientation of the IMF philosophy, the offeror structures an integrated management system to logically flow down requirements through broad-level tasking within an event driven Integrated Master Plan (IMP). Two of the major features of the IMF approach are reviewed below.

The first major feature is an approach for planning the contract effort and preparing the contract documentation, see Figure 1. The Government's RFP provides the offeror with the elements shown in the left column of the figure; i.e., Model Contract (Sections A - J plus attachments), Section K, Section L&M, Technical Requirements Document (TRD), Statement of Objectives (SOO), Work Breakdown Structure (WBS), Applicable Document, Contract Data Requirements List (CDRL), and Contract Line Item Numbers (CLINs). The offeror is also provided with the following annexes to help in preparing the proposal and contract documents:

Sec L-M Annex B	Work Breakdown Structure (WBS)/Dictionary
Sec L-M Annex C	Integrated Master Plan/Schedule (IMP/IMS) Instructions
Sec L-M Annex D	Past Performance Questionnaire
Sec L-M Annex E	Cross -Reference Matrix

Based on the RFP requirements, the offeror shall submit a proposal containing the items listed in the center column of the figure; i.e., a completed Model contract, Preliminary Contract WBS (CWBS), an Integrated Master Plan (IMP) and Schedule (IMS), a Cross Reference Matrix, Applicable Documents, CDRL, and CLINs in accordance with the detailed proposal preparation instructions found in this RFP. The definitive contract contains the elements shown in the right hand column of the figure. These offeror-generated documents will be used in the evaluation of the EMD Technical and Management Approaches.

The IMP expands on the CWBS and its dictionary, and establishes, by tasks (replaces the Statement of Work) and key events with selected narratives, the significant accomplishments and corresponding accomplishment criteria for both the products and processes necessary to accomplish the EMD effort. The IMS corresponds to the IMP and shows the schedule necessary to achieve each significant accomplishment. The Government and the winning offeror will use the IMP and IMS as the primary tool to track the program's technical and schedule progress. The IMP and IMS will be used in evaluating the other portions of the proposal. The proposed CWBS, CDRL, and IMP become part of the contract.

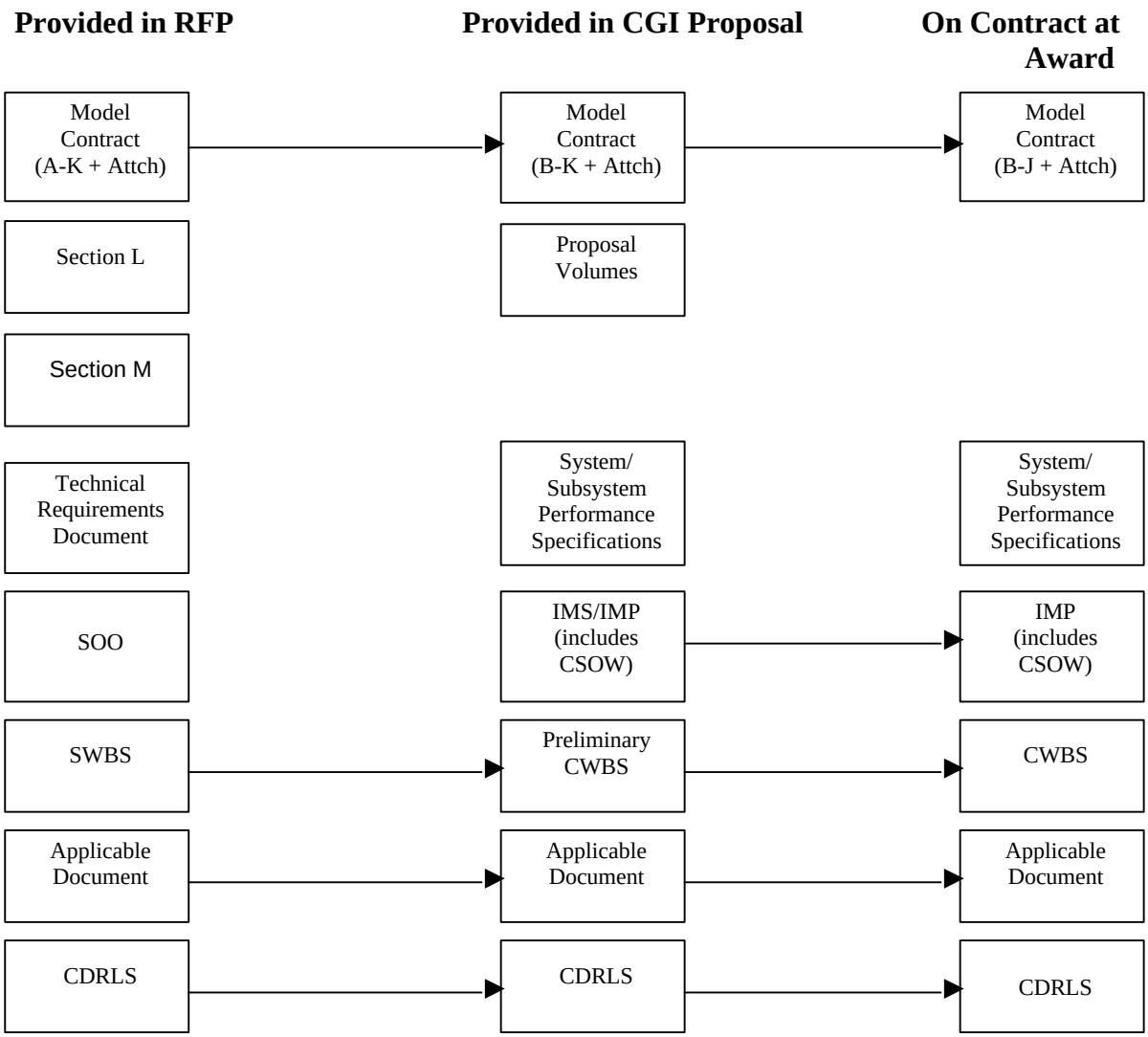

Figure 1 Acquisition Approach

The second major feature of the IMF approach is the use of Integrated Product Teams (IPTs) in implementing the event-driven plan described above. This approach involves a teaming of Government and offeror functional disciplines to integrate and concurrently apply all necessary processes to produce effective and efficient products that satisfy mission requirements.

Under the IMF approach, the program is organized into IPTs that are both empowered and responsible for the performance of their specific product. Each IPT is given the authority to manage their product and allocate resources within the team. The IPT members represent all functions that have a role in the performance of the product, e.g., engineering, manufacturing, contracting, inspection, and logistics. IPT members work together to ensure that an efficient and effective product, which satisfies the requirements, is delivered. The term “product” under IMF

also includes activities and processes as well as a specific product. The offeror organizes IPTs for the proposed EMD "products."

3.0 CONTRACTUAL RELATIONSHIP BETWEEN THE SOW, IMP, AND IMS

The IMP describes in detail *how* the work will be accomplished. The task section within the IMP (will take the place of a separate SOW) defines in detail *what* work is to be accomplished under this Detailed Design and Fabrication phase. The approved IMP is contractually binding and becomes Attachment 1 to the awarded contract. After contract award, the IMP cannot be changed except through normal contract change actions.

In contrast, the IMS is a contract deliverable item under the CDRL and is to be updated "as required" (to maintain schedule flexibility) in accordance with the requirements of the offeror's CDRL.

4.0 INTEGRATED MASTER PLAN (IMP)

A Work Breakdown Structure (WBS) and associated dictionary have been provided in Annex B. The proposed CWBS shall be delivered as part of Volume V of the proposal. All tasks in the IMP shall be correlated to the CWBS proposed by the offeror. There should be a correlation between the CWBS, IMP and the IPTs proposed for the EMD Development. The IMP and IMS shall use the CWBS numbering system to facilitate contract requirements traceability.

The IMP shall clearly and concisely state the offeror's plans for how system engineering efforts will be conducted, how program tasks will be controlled and who, organizationally, will accomplish each task. It should identify key system engineering tasks, their interrelationships with program milestones, and the specific criteria that will be used to track and measure successful task completion. The IMP should provide top-to-bottom traceability from the SOO and TRD to Level 3 of the CWBS. The IMP shall describe: a) key tasks, events and accomplishments to be met by the offeror under the contract; b) the associated criteria for the events and accomplishments; and c) the processes to be used in performing and reporting the tasks required by the contract. The IMP also groups the contract requirements so that designated IPTs may work these requirements. The offeror shall prepare the IMP in a format, which clearly and succinctly conveys to the Government the information requested above. Offeror format is encouraged for this document.

(1) Task: A Task describes a work effort (to be performed by the offeror) which singularly, or in combination with other Tasks, satisfies the EMD SOO and TRD. (The task section contains summary level tasks that read like a Statement of Work and replaces the effort descriptions usually contained in a Statement of Work). The IMP Tasks section shall contain references to the data items. Block 5 on the DD Form 1423-1, Contract Reference, shall contain the appropriate IMP reference.

(2) Event: An Event is defined to be the initiation/conclusion of an interval of major program activity. It shall represent a decision point related to the system maturity with continued system development. Events identified may be in the format of entry and exit events (e.g. Initiate CDR and Complete CDR) or use entry and exit criteria for each event. Other examples are: a) Test Readiness Review, b) Functional Configuration Audit, or c) Physical Configuration Audit.

The minimum Government required events for the Engineering Manufacturing and Development phase are quarterly Program Management Reviews (PMR), Integrated Baseline Review (IBR), a Delta System Preliminary Design Review (PDR), a tailored System Critical Design Review (CDR), NPP Sensor Deliveries, NPP IDPS Delivery, NPP C3S Delivery, Test Readiness Reviews (TRR), a Functional Configuration Audit (FCA), a Physical Configuration Audit (PCA), a Test Plans/Procedures Review (TPP), NPOESS Space Segment Deliveries, NPOESS IDPS Delivery, NPOESS C3S Delivery, NPOESS Field Terminal Segment Delivery, a Pre-shipment Review, and satellite unit deliveries (launch and on-orbit checkout).Quarterly Program Management Reviews, consisting of technical and management aspects, are held to keep the Government informed and facilitate timely problem resolution. The Delta PDR shall be conducted to bring all segments to PDR level, knowing that not all segments had achieved that level of design maturity at the PDRR PDR. The tailored CDR shall be conducted when the detail design is essentially complete to determine that the detail design satisfies the performance and engineering specialty requirements of the development specification. The NPP Sensor Deliveries are required to support the NPP. A TRR is conducted prior to each major test to determine that test procedures are complete and to assure that the offeror is prepared for formal testing. The FCA validates that the development of the system has been completed satisfactorily and that the satellite has achieved the performance and functional characteristics specified in the functional or allocated configuration identification. The PCA is a hardware review and technical examination to verify that the "As Built" system conforms to the technical documentation which defines the satellite. The offeror is encouraged to identify additional Key Events that best reflect the proposed program approach. For each IMP event, there shall be one or more entry or exit significant accomplishments (either entry or exit).

(3) Significant Accomplishment: A Significant Accomplishment is a specified result substantiating an event that indicates the level of progress or maturity directly related to each product/process. Accomplishment shall be measurable. Significant accomplishments are interim or final critical efforts that must be completed prior to entering or exiting an event. Entry accomplishments reflect what must be complete to initiate an event. Exit accomplishments reflect what must be done in order for the event to be successfully closed and that the EMD project is ready for the next event. For each significant accomplishment, there shall be one or more accomplishment criteria. Significant accomplishments include:
a) A desired result at a specified event which indicates a level of design maturity, (or progress, directly related to each product and process
b) A discrete step in a process,
c) A description of interrelationship between different functional disciplines applied to the program (e.g., Maintainability, Manufacturing, and Reliability - the significant accomplishments of each related to Events by IMP Section).

Some examples of significant accomplishments which support a system Critical Design Review Event might be: a) Detailed design completed, b) Design compatibility check completed, c) risk assessment completed, d) producibility analysis completed, e) preliminary hardware product specification review completed.

(4) Accomplishment Criteria: A definitive measure or useful indicator substantiating the maturity level of an associated Significant Accomplishment. It is the completion of specified work that ensures closure of a specified Significant Accomplishment. Criteria shall be measurable (e.g., "Test plan complete and accepted by the spacecraft IPT" is a measurable criteria, whereas "Test plan 85% complete" is difficult to assess, if at all). Examples of accomplishment criteria are:

a) Architectural trade studies satisfy stated objectives
b) Allocated system requirements specified in segment performance requirement documents
c) Draft Interface Control Documents completed and time critical interfaces identified
d) Design risk assessment updated and risk reduction options

(5) Narratives: A collection of concise summaries providing visibility into the offeror's key functional and management processes and procedures, how they relate to the integrated product development process, and an overview of the efforts required to implement them. The narratives shall address only the key elements of implementing or developing a process/procedure (i.e. what the process/procedure will be and how it will be implemented and tracked). The narratives facilitate offeror and Government understanding of and commitment to critical processes/procedures prior to contract award.

The narratives shall complement the respective significant accomplishment and accomplishment criteria sections by indicating where in the particular process the criteria apply. Each narratives subject area shall include a brief objective statement of desired results traceable to the SOO, the processes applicable to that objective, a listing of the proposed existing Government, industry, national and international specifications and standards to be used to achieve the objective. The offeror shall clearly state which of these documents are compliance and which are reference and which of these will be tailored. Compliance documents are contractually binding, while reference documents are for guidance only and are not contractually binding. However, company practices or procedures may only be listed as reference documents. The narratives shall be consistent with applicable technical and management approaches described in the Technical and Management Volume of the proposal. The narrative section is not the forum for providing supporting information or rationale (i.e., why a particular approach has been taken). The minimum list of essential processes for which the Government requires narratives is listed below. However, the offeror may discuss any additional areas that they feels are either critical or of a high risk to his approach.

Systems Engineering. Define the processes to be used for conducting requirements analyses, performing functional analyses, allocating performance requirements, synthesizing design solutions, and performing systems analysis and trade-off studies. Describe the

methodologies that will be used in measuring progress, evaluating alternatives, selecting preferred alternatives, and documenting data and decisions. Include the following Environmental, Safety, and Health considerations as part of the systems engineering processes:

Environmental Compliance. Define the processes to be used for integrating environmental protection considerations into the overall NPOESS system architecture and engineering process. Define and describe procedures for ensuring compliance with environmental laws and regulations. Describe the methodologies that will be used to define and project the expected significance of potential environmental impacts, to identify required environmental legal permit, to identify and implement impact mitigation measures, and to analyze environmental life-cycle effects and costs..

System Safety and Health. Define the processes to be used to develop a system-wide safety and health program that will ensure that safety and health engineering requirements are identified and factored into the design of the NPOESS. Identify system engineering, integrated risk management, and life cycle cost analyses (including environmental life-cycle costs) that will be performed. It is suggested that systems engineering IPT include environmental and safety and health personnel to address any environmental or safety and health issues that may arise..

Hazardous Materials Management. Define the processes to be used for identifying, justifying, minimizing, eliminating, and controlling hazardous materials that will be used during manufacture, processing, maintenance, repair, and disposal of systems components and associated support items. Describe the screening process and methodology for identifying mitigation measures or alternatives for usage of Class II Ozone Depleting Substances, EPA-17 chemicals, and EPCRA Section 313 chemicals. Describe how information regarding the use, storage, transport, and control of hazardous materials will be provided to the Government, so they can fulfill their legal reporting requirements to ensure the program conforms with federal, state, local laws and regulations, Executive Orders, policy directives, and international treaties and agreements

Design Considerations. Define the processes to be used for developing design criteria and special test requirements for moving mechanical assemblies, explosive ordnance devices, self-locking connections, separable fluid fittings, honeycomb sandwich structures, composite structures and structural bonded joints, and pressurized subsystems if any of these devices will be used in your design approach. Describe the technical approaches to be used for establishing design allowables, conducting dynamic loads analyses, evaluating structural integrity, and determining test plan requirements for the system, its subsystems, and component structures. Define the processes to be used for developing design criteria for lightning protection, prevention of electrical overload, and damaging electrical discharge of the EMD.

Electromagnetic Compatibility. Define the processes to be used in conducting an overall EMD electromagnetic effects program.

Contamination. Define the processes that will be used in conducting a contamination control program to deal with environmental control of clean rooms, work stations, cleanliness

levels and general contamination control during all phases of the hardware's lifetime from initial build, through in-orbit end of life.

Quality Assurance. Define the processes to be used in conducting the quality assurance program for system hardware and software during design, development, manufacturing, and test.

Data Management. Define the processes to be used by which all program data (both technical and cost data) will be developed, maintained, and made available to the Government electronically.

Integrated Logistics Support (ILS). Describe the logistics support analysis approach and how that process will be used in developing supportable systems.

Program Protection. Define the processes, via a Security Implementation Plan, to be used for safeguarding critical aspects of the program identified in the NPOESS Program Protection Plan (PPP) and Security Classification Guide (SCG).

5.0 INTEGRATED MASTER SCHEDULE (IMS)

In support of the IMP, the IMS provides a schedule for all the events, significant accomplishments, and accomplishment criteria described in the IMP. The IMS also outlines the detailed tasks and the corresponding calendar schedules (dates) necessary to show how each significant accomplishment will be achieved. All tasks outlined in the IMS should be related to specific IMP accomplishments.

The IMP and the IMS employ a single numbering system based on the Contract Work Breakdown Structure (CWBS), which is also the cornerstone of the Earned Value Management Systems of both the Government and its contractors. The single numbering system provides traceability between the Significant Accomplishments and Accomplishment Criteria (IMP) and the Detailed Tasks (IMS), and through the System Specification to the IMP Taskings.

The offeror shall provide a top level IMS in Vol II, Appendix A to their proposal submittal. The more detailed levels of the IMS, as well as updates, shall be maintained and made available to the Government during contract performance upon request. The IMS is intended as a tool for day to day tracking of the program/project that rolls up to increasingly higher summary levels. The IMS is an integrated and networked multi-layered schedule of program/project tasks. The IMS identifies all IMP tasks, events, accomplishment, and criteria and the expected dates of each. For all significant activities, events, and milestones provide a task number, task name, duration, predecessor tasks, start date and finish date. Illustrate the proper interdependencies of all activities, events and milestones. Provide the ground rules and assumptions used in estimating the task duration shown in the schedule (e.g., historical data, experience on similar efforts, vendor schedules, number of work days per week, number of shifts, company holidays, etc.). Define the program's critical path for the period of performance of this contract, and

provide supporting narrative that explains the critical path and any unusual program aspects. Any anticipated Government support must be identified.

Annex C to Section L
04701-02-R-XXXX

Past Performance Questionnaire

NPOESS EMD/Production

NATIONAL POLAR-ORBITING OPERATIONAL ENVIRONMENTAL SATELLITE SYSTEM (NPOESS)

(DATE)

X.X.X.X Past performance information concerning subcontractors and teaming partners cannot be disclosed to a private party without the subcontractor's or teaming partner's consent. Because a prime contractor is a private party, the government will need that consent before disclosing subcontractor/teaming partner present and past performance information to the prime during exchanges. In an effort to assist the Government's Performance Risk Assessment Group (PRAG) in assessing past performance relevancy and confidence, we request that the major subcontractors/teaming partners identified in the offeror's proposal complete a consent form. The completed consent forms shall be submitted as part of Volume IV – Past Performance as Appendix IV-A. Using the following format:

Subcontractor/Teaming Partner Consent Form for the Release of Present and Past Performance Information
(TO BE ACCOMPLISHED BY SUBCONTRACTOR/TEAMING PARTNER)

RFP 04701-02-R-XXXX
APPENDIX IV-A

Dear Mr. (Contracting Officer)

We are currently participating as a (*subcontractor/teaming partner*) with (*prime contractor or name of entity providing proposal*) in responding to the NPOESS Request for Proposal RFP 04701-02-R-XXXX for the NPOESS Engineering Manufacturing, and Design/Production. We understand that the Government is placing increased emphasis on past performance in order to obtain best value in source selections. In order to facilitate the performance confidence assessment process we are signing this consent form in order to allow you to discuss our present and past performance information with the prime contractor during the source selection process.

_____
(Signature and title of individual who has the authority to sign for and legally bind the company)

Company Name:
Address:
Cage Code:
Phone Number and Fax No:

X.X.X Past Performance Questionnaires. The offeror shall request that each of its critical subcontractors', teaming contractors' and/or joint venture partners' Government Points of Contact (POC's) identified in x.x.x (x) complete the Past Performance Questionnaires (Section L Annex D). An electronic version of Annex Dis available on the RFP web site http://npoesslib.ipo.noaa.gov/npoess_RFP.htm. Submission of questionnaires both in hardcopy and electronically (by downloading the form, entering the data and saving it to a floppy to be mailed with the hardcopy is highly encouraged. The responsibility to request and track the completion of the Past Performance Questionnaires rests solely with the offeror - i.e., it shall not be delegated to any other entity. The offeror shall use the Transmittal Letter (Annex D) when requesting completion of Past Performance Questionnaires and Fact Sheet by its POC's. The offeror shall exert its best efforts to ensure that at least two POC's, per relevant contract, submit a completed Past Performance Questionnaire directly to the Government **not later than five working (5) days after the date established in this RFP for Volume IV – Past Performance submission**. For classified programs, POCs should be encouraged to provide unclassified questionnaires to the maximum extent possible. In those cases where relevant responses are classified, POCs should be encouraged to submit those comments as a separate attachment to questionnaire and reference them in the main questionnaire. Each of the offeror's POC's shall mail any classified portions of a questionnaire IAW the guidance in Section L of the RFP while completed Unclassified, Past Performance Questionnaire shall be mailed directly to:

NPOESS Integrated Program Office
ATTN: Mr. (First name, last name) (Recorder)
Integrated Program Office
Centre Bldg.
8455 Colesville Road, Suite 1450
Silver Spring, MD 20910

Phone: (301) 415-0396
Fax: (301) 415-0384

In addition, POCs should be encouraged to fax the hardcopy questionnaire(s) to the FAX number above. Because the requested data is Source Selection Information, the POC's must call the Source Selection Recorder at (301) 415-0396, before faxing the completed questionnaire(s).

For mailing, in addition to any required security markings, the outside envelope must be marked as follows:

NOTE: TO BE OPENED BY ADDRESSEE ONLY
SOURCE SELECTION INFORMATION – See FAR 3.104
FOR OFFICIAL USE ONLY

Best efforts shall be made to ensure completion and submission of the performance questionnaires directly back to the Government from at least two of the following POC's (in descending order of preference):

a) Program/Project Manager, or equivalent
b) Procuring Contracting Officer/Contract Negotiator or equivalent
c) Technical Representatives
d) Administrative Contracting Officer/Contract Administrator or equivalent
e) Other (As specified on the Contact Data Sheet)

Once the Past Performance Questionnaires are completed by the POCs, the information contained therein shall be considered sensitive and shall not be released to the offeror.

X.X.X.X The POCs shall, wherever possible, be Government employees who actually participated or have personal knowledge of the contractor's past performance in the referenced contract. In addition to Program Managers, POCs could include equipment specialists, systems engineers, DCMA field commanders, program integrators, logisticians and/or supportability engineers, ACOs, pre-award survey monitors, or other government employees beyond those identified by the contractors. In the event that commercial contracts are presented as past performance sources of information, a client authorization letter shall be issued to those commercial POCs authorizing/instructing them to complete a Past Performance Questionnaire. A sample client authorization letter is attached (Annex D). The offeror is required to send the client authorization letter(s) with the Past Performance Questionnaire(s) to each POC on commercial contracts. A separate copy of client authorization letter(s) for each commercial contract, sent to that point, shall be included in the offeror's past performance volume for the government's use in case additional questionnaires need to be sent by the government after RFP submission. Copies of all remaining client authorization letter(s) shall be submitted with offeror's proposal.

The offeror shall ensure that PRAG evaluators have unrestricted access to all past performance information related to a foreign government contract prior to being presented to the PRAG evaluators. Any unreasonable restrictions of access to past performance data related to a foreign contract will be grounds for not considering it as part of the past performance evaluation. In the event that foreign contracts are presented as past performance sources of information, the offeror will follow the same procedures provided for commercial contracts.

X.X.X.X The offeror shall maintain a Past Performance Questionnaire Tracking Record (Annex D) or equivalent form(s), containing the same information, that documents all exchanges between and follow-ups made to each of the POCs identified in the Contact Data Sheets. An initial Past Performance Questionnaire Tracking Record shall be submitted with the offeror's past performance volume. A final Tracking Record shall be submitted with the submission of the offeror's proposal. This exchange/contact between the offeror and its POCs shall cease upon submission of the offeror's proposal to the government. The tracking record shall be submitted in electronic format as well as printed form. The Government may conduct follow-up discussions with any of the people identified in the Tracking Records or in the offeror's Past Performance volume. The Government may obtain other information by sending out additional questionnaires and/or through other sources.

All questionnaires related items (Annex D) must include the following legend at the top and bottom of the page:

SOURCE SELECTION INFORMATION – See FAR 3.104
FOR OFFICIAL USE ONLY

QUESTIONNAIRE w/TRANSMITTAL LETTER, TRACKING RECORD, FACTS SHEET, & CLIENT AUTHORIZATION LETTER

Transmittal Letter to Accompany Past Performance Questionnaire
[TO BE COMPLETED BY OFFEROR* (This box should not show when you send the letter)]

MEMORANDUM FOR: [GOVERNMENT POC]

FROM: [OFFEROR'S ADDRESS AND POINT OF CONTACT]

SUBJECT: Past Performance Questionnaire for Contract(s).

1. We are currently responding to the Department of the Air Force (AF), Los Angeles Air Force Base (LAAFB), Request For Proposal (RFP) 04701-02-R-XXXX, for the engineering, integration, and fabrication of the National Polar-Orbiting Operational Environmental Satellite System (NPOESS). This RFP is being conducted as a Source Selection (down-selection) and specifically requires that we, as an Offeror, do the following:

a. Request and track the completion of the Past Performance Questionnaire for each of the Offeror's, critical subcontractors', teaming subcontractors' and/or joint venture partners' Points of Contact (POC's). The responsibility to request and track the completion of the Past Performance Questionnaires rests solely with the Offeror - i.e., it shall not be delegated to any subcontractors, team contractors, and/or joint venture partners. The Offeror shall exert its best efforts to ensure that at least two POC's, per relevant contract, submits a completed Past Performance Questionnaire directly to the Government not later than [OFFEROR FILL-IN DUE DATE SPECIFIED IN SECTION L]. Each of the Government's POC's shall mail its completed Past Performance Questionnaire (hardcopy and electronic copy via floppy disk) directly to:

NPOESS Integrated Program Office
ATTN: Source Selection Recorder
Integrated Program Office
Centre Building
8455 Colesville Road, Suite 1450
Silver Spring, MD 20910

b. Request the outside envelope be marked as follows:

NOTE: TO BE OPENED BY ADDRESSEE ONLY
SOURCE SELECTION INFORMATION – See FAR 3.104
FOR OFFICIAL USE ONLY

c. Encourage POCs to fax a hard copy of any completed questionnaires to the NPOESS source selection facility FAX number (301) 415-0384. Because the requested data is source selection information, the POCs must call the Source Selection Recorder at (301) 415-0396, before faxing the completed questionnaire(s).

2. We have identified subject contract(s), active since 13 March 1997, as relevant to this acquisition and you as our POC. As such, please take a few moments of your time to download and fill out the electronic questionnaire located at http://npoesslib.ipo.noaa.gov/npoess_RFP.htm and send both a hardcopy and electronic copy (on floppy disk) directly back to NPOESS. The information contained in the completed Past Performance Questionnaires is considered sensitive and can not be released to us, the Offeror. If you have any questions about the acquisition or the attached questionnaire, your questions must be directed back to the NPOESS IPO points of contact identified above. Thank you for your timely assistance.

Sincerely,

[OFFEROR'S POINT OF CONTACT]

Attachment(s)

1. Client Authorization Letter(s), if applicable
2. Fact Sheet
3. Performance Survey (Hardcopy provided, use of electronic form at http://npoesslib.ipo.noaa.gov/npoess_RFP.htm is encouraged)

NOTE TO OFFERORS: This procurement could be similar to commercial supplies/services. Therefore, to assist the Government's Performance Risk Assessment Group (PRAG) in assessing your past performance on relevant commercial contracts, the following letter must be sent to your points of contact (POC's) for those commercial efforts that you identify to us in your past performance volume. Should you propose to use critical subcontractors, teaming contractors, and/or joint venture partners, you must obtain a similar client authorization letter from each entity. HOWEVER, it is the your sole responsibility, as the Offeror, to then send out these authorization letters with the questionnaires to your own POC's and to those of your subcontractors, teaming contractors, or joint venture partners.

Client Authorization Letter
(TO BE ACCOMPLISHED BY OFFEROR)*

Dear (Client):

We are currently responding to the Department of the Air Force (AF), Los Angeles Air Force Base (LAAFB), Request For Proposal (RFP) 04701-02-R-XXXX for the design, integration, and fabrication of the National Polar-Orbiting Operational Environmental Satellite System (NPOESS).

As you know an Offeror's past performance has become an element of increased emphasis in the AF's acquisitions. They are requesting that clients of companies who submit proposals in response to their RFP for the NPOESS be contacted, and that their participation in the validation process be requested. We, therefore, respectfully request and hereby authorize you to complete the Questionnaire with regards to work we have performed for you since 13 March 1997. A blank survey is attached, however the government prefers that respondents download the electronic form (http://npoesslib.ipo.noaa.gov/npoess_RFP.htm) and submit the completed form in both hardcopy and softcopy (floppy disk) **directly to the NPOESS Integrated Program Office (IPO) Point(s) of Contact at the following address**:

NPOESS Integrated Program Office
ATTN: Source Selection Recorder
Integrated Program Office
Centre Building
8455 Colesville Road , Suite 1450
Silver Spring MD 20910
Reference: RFP: 04701-02-R-XXXX

We have identified Mr./Ms. (Name) of your organization as the point of contact based on their knowledge concerning our work. Your cooperation in this matter is appreciated. Any questions may be directed to: [NAME, PHONE NUMBER, FAX NUMBER FOR THE OFFEROR'S POINT OF CONTACT]

Sincerely,
[OFFEROR'S POINT OF CONTACT]]

Past Performance Questionnaire Tracking Record
[TO BE ACCOMPLISHED BY OFFEROR]*

OFFEROR'S REFERENCES COMPANY/AGENCY NAME:
REFERENCE NAME:
REFERENCE ADDRESS**:**

Date Of Action	Type Of Action (E.G., Sent Questionnaire, Follow-Up Call)	Person Contacted/ Phone #	Company Position Of Person Contacted	Offeror Contact	Status Of Questionnaire

Past Performance "CONTACT DATA Sheet"
(TO BE COMPLETED BY PERSON FILLING SURVEY)

Background Information (for person filling out the survey):

First Name:				
Last Name:				
Rank:				
Title:				
Organization:				
Phone:				
Fax:				
E-Mail Address:				
Dates of involvement: (6 month minimum)	**From:**		**To:**	

Contract Information (for the contract involved):

Company:					
Division:					
Contract #:					
Dollar Value:	(Current Dollar Value) **$**			**Million** ☐	**Thousand** ☐
Work:	**Complete** ☐	**Ongoing** ☐			
Award date:					
End Item Description(s):	(In addition to describing end item deliverable, please indicate any significant products delivered or services rendered in the past five years)				
Major Design Milestones	(Ex: Preliminary or Critical Design Reviews - list only those which have occurred in the past 5 years)				
Significant Testing Milestones	(Ex: Developmental, Acceptance, Integration, Operational, Flight Tests - list only that which has occurred in the past 5 years)				
Target Cost:	**On** ☐	**Above** ☐	**Below** ☐	*By:*	**%**
Schedule:	**On** ☐	**Ahead** ☐	**Behind** ☐	*By:*	**Months**

Past Performance Questionnaire

Based on your knowledge of the contract identified above, please provide your assessment of how well the contractor performed on each of the following topics.

1. System Performance. The focus of the section is to determine how well an offeror has been able to match a proposed system configurations, Concept of Operations (CONOPS), and system level performances to the original program requirements.
2. Design Performance. The focus of this section is to determine how well an offeror has been able to develop designs that achieve predicted performance.
3. System, Engineering, Integration, and Test (SEIT). The focus of this section is to determine how well an offeror has been able to adequately develop overall systems engineering approaches for proposed programs.
4. Planning. The focus of this section is to determine the adequacy, consistency, and flexibility of an offeror's program planning and management process over the entire period of a contract.
5. Management and Organization. The focus of this section is to determine the adequacy of an offeror's past approach to organizing, staffing and managing programs.
6. Cost. The focus of this section is to determine the adequacy of an offeror's ability to manage program costs.

It is very important to keep in mind that only performance in the ***past five years*** is relevant.

Rating Definitions

Exceptional: The contractor's performance meets contractual requirements and exceeds many (requirements) to the Government's benefit. The contractual performance was accomplished with few minor problems for which corrective actions taken by the contractor appear or were highly effective.

Very Good: The contractor's performance meets contractual requirements and exceeds some (requirements) to the Government's benefit. The contractual performance was accomplished with some minor problems for which corrective actions taken by the contractor appear or were effective.

Satisfactory: The contractor's performance meets contractual requirements. The contractual performance contained some minor problems for which corrective actions taken by the contractor appear or were satisfactory.

Marginal: Performance does not meet some contractual requirements. The contractual performance reflects a serious problem for which the contractor has not yet identified corrective actions or the contractor's proposed actions appear or were only marginally effective or were not fully implemented.

Unsatisfactory: Performance does not meet ~~most~~ contractual requirements and recovery is not likely in a timely manner. The contractual performance contains serious problem(s) for which the contractor's corrective actions appear or were ineffective.

(Please check the appropriate rating and ***provide explanatory comments, as appropriate***)

Part I. MISSION CAPABILITY

A System Performance

1. Ability to meet program requirements					
Exceptional (Please Comment)	Very Good	Satisfactory	Marginal (Please Comment)	Unsatisfactory (Please Comment)	Not Applicable
Comment:					
2. Ability of system to meet lifetime requirements (operating lifetime, storage, life cycle).					
Exceptional (Please Comment)	Very Good	Satisfactory	Marginal (Please Comment)	Unsatisfactory (Please Comment)	Not Applicable
Comment:					
3 Ability of demonstrations and simulations to predict system performance requirements as verified by (Check all that apply): Flight Tests Ground Tests Simulations					
Exceptional (Please Comment)	Very Good	Satisfactory	Marginal (Please Comment)	Unsatisfactory (Please Comment)	Not Applicable
Comment:					
4. Impact trade process on final system performance					
Exceptional (Please Comment)	Very Good	Satisfactory	Marginal (Please Comment)	Unsatisfactory (Please Comment)	Not Applicable
Comment:					
5. Ability to design an efficient architecture that accounts for all aspects of the user operational environment.					
Exceptional (Please Comment)	Very Good	Satisfactory	Marginal (Please Comment)	Unsatisfactory (Please Comment)	Not Applicable
Comment:					

B. Design Performance

1. Overall capabilities to design, develop, manufacture, test and deliver, satellite system, large data analysis, and/or ground distribution networks.					
Exceptional (Please Comment)	Very Good	Satisfactory	Marginal (Please Comment)	Unsatisfactory (Please Comment)	Not Applicable
Comment:					

2. Ability to accommodate performance enhancements and/or technology assessment, development, and insertion					
Exceptional (Please Comment)	Very Good	Satisfactory	Marginal (Please Comment)	Unsatisfactory (Please Comment)	Not Applicable
Comment:					

3. Space Segment - Ability to flow space segment specifications from system specifications. (Space Segment refers to any platform, sensor, or component in orbit)					
Exceptional (Please Comment)	Very Good	Satisfactory	Marginal (Please Comment)	Unsatisfactory (Please Comment)	Not Applicable
Comment:					

4. Space Segment - Ability of space segment design to meet parameters of space segment specifications					
Exceptional (Please Comment)	Very Good	Satisfactory	Marginal (Please Comment)	Unsatisfactory (Please Comment)	Not Applicable
Comment:					

5. Space Segment - Ability to respond to requirement changes and accommodate future risk reduction plans					
Exceptional (Please Comment)	Very Good	Satisfactory	Marginal (Please Comment)	Unsatisfactory (Please Comment)	Not Applicable
Comment:					

6. C^3 Segment - Ability to flow C^3 segment specifications from system specifications. (C_3 Segment refers to all functions required for mission management, day-to-day operations and state-of-health monitoring of any component within the Space Segment)					
Exceptional (Please Comment)	Very Good	Satisfactory	Marginal (Please Comment)	Unsatisfactory (Please Comment)	Not Applicable
Comment:					

7. C^3 Segment - Ability of C^3 segment design to meet parameters of C^3 segment specifications					
Exceptional (Please Comment)	Very Good	Satisfactory	Marginal (Please Comment)	Unsatisfactory (Please Comment)	Not Applicable
Comment:					

8. C^3 Segment - Ability to respond to requirement changes and accommodate future risk reduction plans					
Exceptional (Please Comment)	Very Good	Satisfactory	Marginal (Please Comment)	Unsatisfactory (Please Comment)	Not Applicable
Comment:					
9. Ground Data Processing Segment - Ability to flow Ground Data Processing segment specifications from system specifications					
Exceptional (Please Comment)	Very Good	Satisfactory	Marginal (Please Comment)	Unsatisfactory (Please Comment)	Not Applicable
Comment:					
10. Ground Data Processing Segment - Ability of Ground Data Processing segment design to meet parameters of Ground Data Processing segment specifications					
Exceptional (Please Comment)	Very Good	Satisfactory	Marginal (Please Comment)	Unsatisfactory (Please Comment)	Not Applicable
Comment:					
11. Ground Data Processing Segment - Ability to respond to requirement changes and accommodate future risk reduction plans					
Exceptional (Please Comment)	Very Good	Satisfactory	Marginal (Please Comment)	Unsatisfactory (Please Comment)	Not Applicable
Comment:					
12. Field Terminal Segment - Ability to flow field terminal segment specifications from system specifications. (Field Terminal Segment refers to any receivers used by deployed/remote units to obtain data in real time.)					
Exceptional (Please Comment)	Very Good	Satisfactory	Marginal (Please Comment)	Unsatisfactory (Please Comment)	Not Applicable
Comment:					
13. Field Terminal Segment - Ability of Field Terminal segment design to meet parameters of Field Terminal segment specifications					
Exceptional (Please Comment)	Very Good	Satisfactory	Marginal (Please Comment)	Unsatisfactory (Please Comment)	Not Applicable
Comment:					
14. Field Terminal Segment - Ability to respond to requirement changes and accommodate future risk reduction plans					
Exceptional (Please Comment)	Very Good	Satisfactory	Marginal (Please Comment)	Unsatisfactory (Please Comment)	Not Applicable
Comment:					

C. SEIT

1. Ability to understand the user requirements					
Exceptional (Please Comment)	Very Good	Satisfactory	Marginal (Please Comment)	Unsatisfactory (Please Comment)	Not Applicable
Comment:					

2. Ability to identify all significant technical, cost, and schedule constraints/risks early in program.					
Exceptional (Please Comment)	Very Good	Satisfactory	Marginal (Please Comment)	Unsatisfactory (Please Comment)	Not Applicable
Comment:					

3. Adequacy of Testing Program in accomplishing goals of program					
Exceptional (Please Comment)	Very Good	Satisfactory	Marginal (Please Comment)	Unsatisfactory (Please Comment)	Not Applicable
Comment:					

4. Ability to design a system architecture using cost-performance trade studies and analysis.					
Exceptional (Please Comment)	Very Good	Satisfactory	Marginal (Please Comment)	Unsatisfactory (Please Comment)	Not Applicable
Comment:					

5. Effectiveness of system engineering capabilities including requirements flowdown to various segments and components of the system and ability to trace functional threads.					
Exceptional (Please Comment)	Very Good	Satisfactory	Marginal (Please Comment)	Unsatisfactory (Please Comment)	Not Applicable
Comment:					

6. Effectiveness of software system engineering capabilities including requirements flowdown to appropriate segments and components of the system and ability to trace functional threads.					
Exceptional (Please Comment)	Very Good	Satisfactory	Marginal (Please Comment)	Unsatisfactory (Please Comment)	Not Applicable
Comment:					

7. Appropriateness of facilities (production, integration, test, etc.) and personnel (quantity, training, capability, etc.).					
Exceptional (Please Comment)	Very Good	Satisfactory	Marginal (Please Comment)	Unsatisfactory (Please Comment)	Not Applicable
Comment:					

D. Planning

1. Completeness of system documentation such as system/subsystem performance specifications (for example, the extent to which documentation enabled thorough assessment of final delivered product)					
Exceptional (Please Comment)	Very Good	Satisfactory	Marginal (Please Comment)	Unsatisfactory (Please Comment)	Not Applicable
Comment:					
2. Completeness and Reasonableness of Integrated Master Plan					
Exceptional (Please Comment)	Very Good	Satisfactory	Marginal (Please Comment)	Unsatisfactory (Please Comment)	Not Applicable
Comment:					
3. Realism, Reasonableness and Completeness of Program Schedule/Integrated Master Schedule					
Exceptional (Please Comment)	Very Good	Satisfactory	Marginal (Please Comment)	Unsatisfactory (Please Comment)	Not Applicable
Comment:					
4. Adequacy of support plans (e.g. Risk Management)					
Exceptional (Please Comment)	Very Good	Satisfactory	Marginal (Please Comment)	Unsatisfactory (Please Comment)	Not Applicable
Comment:					

E. Management and Organization (including Program Execution)

1. Total System Performance Responsibility [TSPR] effectiveness - how well the contractor managed and executed a program for which it had total responsibility.					
Exceptional (Please Comment)	Very Good	Satisfactory	Marginal (Please Comment)	Unsatisfactory (Please Comment)	Not Applicable
Comment:					
2. Ability to plan and implement a process for interacting with other contractors.					
Exceptional (Please Comment)	Very Good	Satisfactory	Marginal (Please Comment)	Unsatisfactory (Please Comment)	Not Applicable
Comment:					
3. Ability to consider end user needs during all stages of contract.					
Exceptional (Please Comment)	Very Good	Satisfactory	Marginal (Please Comment)	Unsatisfactory (Please Comment)	Not Applicable
Comment:					
4. Ability to work with government program office.					
Exceptional (Please Comment)	Very Good	Satisfactory	Marginal (Please Comment)	Unsatisfactory (Please Comment)	Not Applicable
Comment:					
5. Ability to plan and execute an effective incremental risk mitigation program from development to production to operation.					
Exceptional (Please Comment)	Very Good	Satisfactory	Marginal (Please Comment)	Unsatisfactory (Please Comment)	Not Applicable
Comment:					
6. Overall capabilities and expertise of personnel working on project (in terms of expertise, continuity, and relevancy).					
Exceptional (Please Comment)	Very Good	Satisfactory	Marginal (Please Comment)	Unsatisfactory (Please Comment)	Not Applicable
Comment:					
7. Ability to effectively staff and organize team working on project.					
Exceptional (Please Comment)	Very Good	Satisfactory	Marginal (Please Comment)	Unsatisfactory (Please Comment)	Not Applicable
Comment:					

8. Ability to meet major milestones and deliver product or service on schedule					
Exceptional (Please Comment)	Very Good	Satisfactory	Marginal (Please Comment)	Unsatisfactory (Please Comment)	Not Applicable
Comment:					

Part II. COST

1. Ability to anticipate cost					
Exceptional (Please Comment)	Very Good	Satisfactory	Marginal (Please Comment)	Unsatisfactory (Please Comment)	Not Applicable
Comment:					
2. Ability to use a validated cost/schedule control system such as Earned Value management reporting.					
Exceptional (Please Comment)	Very Good	Satisfactory	Marginal (Please Comment)	Unsatisfactory (Please Comment)	Not Applicable
Comment:					
3. Ability to provide timely accurate financial reports and forecasts.					
Exceptional (Please Comment)	Very Good	Satisfactory	Marginal (Please Comment)	Unsatisfactory (Please Comment)	Not Applicable
Comment:					

Performance Survey

The foregoing inquiry should have allowed you to provide us with a reasonable assessment of the way in which the subject contractor has performed on recent contracts. The following questions are intended to allow you an opportunity to expand on your evaluation and provide us with a more comprehensive understanding of company performance. Completion of this segment of the Questionnaire is optional.

PROGRAM EXECUTION

1. Were products generally delivered when required contractually? If not, was the delay the result of contracting agency or contractor actions?
2. If schedule relief was provided by contract modification, did it result from scope change or from an overrun condition?

COST

1. Did the total cost exceed initial contract value by more than 10%? Yes No If so, by how much?
2. What proportion of increased costs were attributable to contracting agency actions (added scope, directed schedule mods, etc), rather than to development problems for which the contractor was responsible?

OVERALL

1. If Award Fee contracts were used for the procurement, what percentage of available fee did the contractor earn in the periods before and following completion of the Preliminary Design Review? Critical Design Review?
2. What is considered to be an average percentage award fee bestowed by your organization for similar contracts?
3. Knowing what you do today, would you award this contract to this contractor again? Yes No
4. If you have any other comments that you would like to make (e.g. especially noteworthy performance, how to improve this survey, etc.) include them here also. Continue on another sheet, if necessary.

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CONTRACT DATA REQUIREMENTS

Introduction

The offeror is required to propose the recommended contractual data required for delivery to the Government in response to this RFP. The offeror shall prepare a Contract Data Requirements List using DD Form 1423 format. In addition, the contractor is required to identify all other data being made available to the government and a proposed method of availability (such as via a data accession list). The government's interest in subjects and/or types of data are reflected in the following tables. This list is not intended to be all-inclusive.

The earned value contract funding, schedule and Contractor Cost Data Report data should be provided to the government using electronic data interchange (EDI) in accordance with the American National Standards Institute (ANSI) Accredited Standards Committee (ASC) X12 uniform standards. The transaction set [839/806/196] will be used to exchange these data. Conform to the data format requirements specified in the approved Federal Implementation Convention for this (these) transaction set(s), version release 004010 of the ANSI ASC X12 standards.

All data should be provided to the government using electronic data interchange whenever possible via a link between the Government's and Contractor's Management Information System or via a Contractor-maintained Electronic Bulletin Board. Data should be provided in contractor format unless required by a specific data standard.

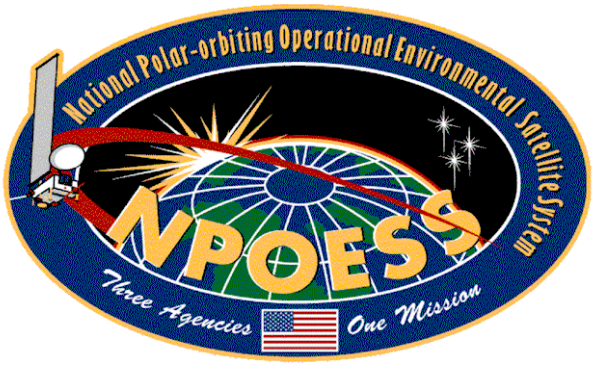
Contract Data Requirements List

Item	Title	Date Specific	Comments
1.	Technical Data Packages for major demonstrations, simulations, and architectures		
2.	Configuration Management Plan	IBR	
3.	DOC Form 33, 34 and 35 for Transmitter, Receiver and Antenna Characteristics	Awd + 6 mos	
4.	NTIA Stage 3 and Stage 4 Submittal (Certification of Spectrum Support DOC Form NTIA-44	Awd + 6 mos	Provide Compliance document for SPS Stage 2 recommendations
5.	ITU Advanced Publication Forms for Radio Frequency Assignment Plan	Launch – 5 years	
6.	System Security Authorization Agreement		Use Air Force System Security Instruction, 5024, Volume 4 dated 01 March 1999 as the reference.
7.	Certification and Accreditation Document		Use Air Force System Security Instruction, 5024, Volume 4 dated 01 March 1999 as the reference.
8.	Security Implementation Plan	IBR	
9.	NPOESS System to External System Interface Control.		Includes Documents long term archives, NPP, field terminals, etc.
10.	Facility Master Plan	Awd + 60 days	Includes requirements, design, environmental issues, etc.
11.	Facility Drawings		Review construction drawings 90 days prior to construction. Deliver “as built drawings” 30 days after completion using electronic media.
12.	Test and Evaluation Program Plan(s)		
13.	Software Development Plan		Required Annex: Software Capability Risk Mitigation Plan
14.	Common Data Format Control Book	6 mos prior to NPP Launch	
15.	Technical Manuals	Draft for NPP Launch	Use NOAA Standards S24.801 & S24806 as reference
16.	Operations and Maintenance Manuals		Use NOAA Standards S24.801 & S24806 as reference

Item	Title	Date Specific	Comments
17.	On orbit Operators Manual	90 days prior to NPP launch to 6 mos prior to C1	
18.	Data Accession List/Internal Data (DAL)	Monthly	
19.	Contract Funds Status Report (CFSR)		
20.	Contractor Cost Data Report (CCDR) Form 1921	Major Milestones	
21.	Functional Cost-Hour Report (FCHR), DD Form 1921-1	Major Milestones	
22.	Progress Curve Report (PCR), DD Form 1921-2	Major Milestones	
23.	Contractor Performance Report Formats 1-5, DD 2734	Major Milestones	
24.	Environmental, Safety and Health Program Plan	Awd + 90 days	Plan should address steps to comply with the following regulations as a minimum: Environmental Safety Suitability & Effectiveness AFI 63-1201; NEPA, 40 CFR 1500-1508; NOAA Administrative Order 216-6, AFI 32-7061; Environmental Review EO 12114, NOAA Administrative Order 216-6; AFI 327-61; and Pollution Prevention AFI 32-7080.
25.	Training Plan	Defer to Delivery	Use NOAA Standards S24.804 & S24.806 as a guide. Contractor will provide training. Course material includes instructor lesson plans, student guides, overhead, etc. for initial and follow-on sustainment training
26.	Logistics Support Plan	Awd + 90 days	
27.	Thermal models of the CrIS and VIIRS Instruments	NPP IRR – 4 months (Jan 2004)	
28.	NASTRAN Finite Element Models of the CrIS and VIIRS Instrument	NPP IRR – 4 mos (Jan 2004)	

Data Accession List

Item	Title	Date Specific	Comments
1.	NPOESS System Specification w/updates		
2.	NPOESS Sensor to Spacecraft Interface Control Documents		
3.	NPOESS Segment to Segment Interface Control Documents		
4.	Equipment Drawings		
5.	Parts Control Plan		
6.	NPOESS Space and Launch Support Segment Specifications		
7.	NPOESS C3 and IDP Segment Specifications (including NPP requirements)		
8.	Flight Activation Operations Plan		
9.	Missile System Pre-Launch Safety Plan/Accident Risk Assessment Report	2006	Air Force Eastern/Western Region Regulation 127-1
10.	Environmental Review Document	2004	EO 12114 NOAA Administrative order 216-6
11.	Environmental Due Diligence Assessment	TBD	Comprehensive Environmental Response, Compensation & Liability Act (CERCLA) Sec. 120, DOC Real Property Management Manual AFI, 32-7066
12.	NPOESS Spacecraft Environmental Baseline Survey of Launch-Processing Site	2006	AFI 32-7061
13.	Health Hazard Analysis Reports	Throughout Program	AFI 91-202
14.	Safety Assessment Reports	Throughout Program	
15.	Hazardous Materials Handling Plan	2002	FI 32-7086, EO 12856



AWARD
and
MISSION SUCCESS
FEE PLAN

Attachment X
to
Contract F04701-02-C-0500

Title	Date	Pages
Award and Mission Success Fee Plan, Basic Provisions	xx xxx xxxx	X
Annex 1-FDO and AFRB Members	xx xxx xxxx	1
Annex 2-Allocations and Earnings for the Development Effort	xx xxx xxxx	1
Annex 3-Allocations and Earnings for the Production Effort	xx xxx xxxx	1
Annex 4-Mission Success Fee Events and Amounts	xx xxx xxxx	1
Annex 5-Award Fee Evaluation Criteria	xx xxx xxxx	1

AWARD AND MISSION SUCCESS FEE PLAN
BASIC PROVISIONS

1. INTRODUCTION

This plan is the basis for the Government's Award Fee and Mission Success Fee evaluation of the contractor's performance under contract F04701-02-C-0500 for the Engineering and Manufacturing Development (EMD) and Production phases of the National Polar-orbiting Operational Environmental Satellite System (NPOESS).

This contract includes two types of award fee. The first is simply called "Award Fee". The second is called "Mission Success Fee". Both are award fee constructions and both are covered by this plan. The first (Award Fee) incentivizes the contractor's management approaches, technical excellence, and cost control efforts on an on-going, period-by-period basis. The second (Mission Success Fee) incentivizes the contractor's realization of certain specific achievements that are critical to the success of the program.

Both Award Fee and Mission Success Fee are further divided between the development and production efforts of this contract. The development effort is the design, development and deployment of the system interim contract support and the production of the first two satellites. The production effort is for four production satellities. *description of production effort*.

The Award Fee and Mission Success Fee earned under this plan are earned at risk as described in contract clause H-XXX (On-Orbit Performance Incentive).

2. RESPONSIBILITIES

The Fee Determining Official (FDO) and Award Fee Review Board (AFRB) members are listed in Annex 1.

The FDO is the Government official designated to determine the amount of Award Fee and Mission Success Fee earned and payable to the Contractor. The FDO also makes rollover decisions.

The AFRB performs analysis and makes recommendations to the FDO for Award Fee and Mission Success Fee promptly after the end of each Award Fee period and the scheduled end of each Mission Success Fee event.

The AFRB Chair may authorize interim Award Fee and Mission Success Fee payments.

The contractor's program manager may present a self-assessment to the AFRB following the completion of each Award Fee period or Mission Success Fee event. He or she may participate in the discussions of the AFRB when the AFRB meets for the purpose of making a recommendation to the FDO, and may provide a self-assessment summary that will accompany the AFRB's recommendation to the FDO. The contractor may reclama the FDO's award fee determination and request consideration of the reclama.

3. FEE INTEGRITY

Determination of the earned Award Fee and Mission Success fee is inherently subjective. However, the process is clear enough to allow the contractor to understand how the award amount is based on performance. The contractor's assessment of its own performance, assessments produced by Government performance monitors, the knowledge of the AFRB and FDO, and the criteria specified in this plan shall form the basis for the recommendations of the AFRB and

determinations by the Fee Determining Official.

The contractor acknowledges the subjectivity of the performance evaluation and fee determination processes, and will accept FDO fee determinations as final. The only basis for disputes is failure of the Government to faithfully follow the guidelines of this award fee plan or that the government did not given appropriate consideration of extenuating circumstances that affected the amount of the award fee.

4. AWARD FEE EVALUATION AREAS

For the Award Fee, the Government will assess the contractor's performance and progress under three areas: Management, Technical, and Cost. The criteria for these areas are listed in Annex 5. Additional areas may be added as the program progresses. Additional areas will be added by mutual agreement.

5. SCORING

Award Fee and Mission Success Fee determinations are subjective and are not firmly tied to a numerical system. However, a scoring system as shown in Figure 1 will be used by the AFRB in making its recommendation to the FDO at the end of each Award Fee period or upon completion of each Mission Success Fee event.

Figure 1

Award & Mission Success Fee Scoring	
Excellent	90-100%
Fully Satisfactory	75-89%
Satisfactory	60-74%
Marginal	50-59%
Unsatisfactory	Below 49%

The AFRB will subjectively assign a percentage scoring, based on the criteria definition, to each of the Award Fee areas. For the Mission Success Fee recommendation, the AFRB will consider the event as a whole as it makes its subjective scoring. This will include and assessment of how much of the mission success objectives were met.

6. AWARD FEE DETERMINATION

After reviewing the contractor's self-assessment and the recommendations of the AFRB, the FDO will make an Award Fee determination. This plan will form the basis for a FDO determination, but the FDO may make their independent judgment of the contractor's performance and progress. The AFRB recommendation is just that—a recommendation. Where the FDO's opinion differs from that of the AFRB, they will relate that opinion to the contractor in their decision letter. It will also include those areas that were major determination factors.

x. INTERIM (or PROVISIONAL) AWARD FEE PAYMENTS

At the mid-point of an Award Fee period, the AFRB Chair may authorize an interim payment of up to 80% of the Award Fee available for that period, in accordance with the clause at AFMCFARS 5352.216-xxxx. In the event that the contractor does no meet the criteria the AFBC will inform the contractor that they have not met the criteria and provide fee instructions.

x. INTERIM (or PROVISIONAL) MISSION SUCCESS FEE PAYMENTS

For any Mission Success Fee event, the FDO may authorize one or more interim payments of Mission Success fee. The contractor may submit a plan for achieving any Mission Success event for the FDO's consideration—this plan should briefly describe incremental achievements needed to make the Mission Success event a reality and may start as early as four years before the scheduled Mission Success event. The AFRB Chair may authorize interim Mission Success Fee payments at the one-, two-, and three-year points, so long as the cumulative value of these interim payments

do not exceed the percentages shown in Figure 2. For all purposes, interim Mission Success Fee payments are like interim Award Fee payments and are subject to Government recoupment if the final FDO fee determination for the Mission Success event is less than the amount authorized as interim fee.

Figure 2

Mission Success Fee Interim Payments	
Three Years Before	20%
Two Years Before	40%
One Year Before	60%

x. CONTRACT TERMINATION

If the contract is terminated for the convenience of the Government, the FDO will determine the fee earned based on the degree of work completed. The contractor shall provie their assessment of the fee earned to the FDO for their consideration in the assessment

x. CHANGES TO THE FEE PLAN

Before the beginning of an Award Fee period, the Government may unilaterally change the fee evaluation criteria, the distribution of the remaining fee among the remaining periods, the allocation of fee across the areas, and other matters covered in this plan. The contracting officer shall notify the Contractor in writing of changes to the plan at least fifteen (15) calendar days before the start of the affected period.

Up to twelve months before scheduled completion of a Mission Success Fee event, the Government may unilaterally change the Mission Success Fee events, the distribution of the remaining fee among the remaining events, and other matters covered in this plan. The contracting officer shall notify the Contractor in writing of changes to the plan at least fifteen (15) calendar days before the start of the affected period.

In the event it becomes necessary to delete or change a Mission Success Fee event within twelve months of the scheduled completion of the event because of program changes completely outside the contractor's control, the FDO may reapportion the fee available for that event to other events (including newly-created Mission Success Fee events). For example, a NPP launch delay because of launch pad scheduling difficulties arising within twelve months of the scheduled launch will serve as a basis for reapportioning the Mission Success Fee available for a NPP launch among other Mission Success Fee events.

x. ROLLOVER OF UNEARNED AWARD FEE

The FDO, at their discretion, may allow rollover of unearned Award Fee into the following period. This rollover will be reflected in Annex 2 of this plan. For administrative purposes, the rollover is recorded in a separate column in Annex 2 and is not added to the "available" column—but the rollover amount is, in fact, available for the period in which it is placed.

When the FDO authorizes rollover, they may specify the conditions, in general terms, the contractor must achieve to earn the rollover amount. The contractor shall in submit a letter agreeing with the apportionment of recommending a change. The FDO will review the recommendations and approve or reject the recommendation. The FDO will make their determination in ten (10) working days.

x. ROLLOVER OF UNEARNED MISSION SUCCESS FEE

The FDO, at their discretion, may allow rollover of unearned Mission Success Fee into the following events or into new events. This rollover will be reflected in Annex 4 of this plan. For administrative purposes, the rollover is recorded in a separate column in Annex 4 and is not added to the "available"

column—but the rollover amount is, in fact, available for the period in which it is placed.

When the FDO authorizes rollover, he or she may specify the conditions, in general terms, the contractor must achieve to earn the rollover amount. The contractor shall in submit a letter agreeing with the apportionment of recommending a change. The FDO will review the recommendations and approve or reject the recommendation. The FDO will make their determination in ten (10) working days.

ANNEX 1
to the Award Fee Plan

FDO and AFRB Members

Fee Determining Official (FDO):

The NPOESS Program Director

and in his absence—

The NPOESS Deputy System Program Director

Award Fee Review Board (AFRB):

Chair—NPOESS Deputy System Program Director

and in his absence—

the NPOESS Associate Director for Acquisition

Members—

the NPOESS Associate Director for Acquisition
the NPOESS Associate Director for Operations
the NPOESS Associate Director for Technology Transfusion
the NPOESS Deputy Associate Director for Acquisition
the IPO Chief Systems Engineer
the IPO Director of Program Control
the IPO Contracting Officer
the Program Counsel (Air Force Space and Missiles Systems Center)
the NPP Project Manager (NASA Goddard Space Flight Center)

ANNEX 2
to the Award Fee Plan

Award Fee Allocations and Earnings for the Development Effort (CLINs _____)

		(a) Total			(b) Management		(c) Technical		(d) Cost	
Period	Dates	(1) Available	(2) Earned	(3) Roll-Over	(1) Available	(2) Earned	(1) Available	(2) Earned	(1) Available	(2) Earned
1	AUG2002-JAN2003	$	$		$	$	$	$	$	$
2	FEB2003-JUL2003	$	$	$	$	$	$	$	$	$
3	AUG2003-JAN2004	$	$	$	$	$	$	$	$	$
4	FEB2004-JUL2004	$	$	$	$	$	$	$	$	$
5	AUG2004-JAN2005	$	$	$	$	$	$	$	$	$
6	FEB2005-AUG2005	$	$	$	$	$	$	$	$	$
7a	SEP2005-AUG2006	$	$	$	$	$	$	$	$	$
8a	SEP2006-AUG2007	$	$	$	$	$	$	$	$	$
9a	SEP2007-AUG2008	$	$	$	$	$	$	$	$	$
10a	SEP2008-AUG2009	$	$	$	$	$	$	$	$	$
11a	SEP2009-AUG2010	$	$	$	$	$	$	$	$	$
12a	SEP2010-AUG2011	$	$	$	$	$	$	$	$	$
	TOTALS:	$	$		$	$	$	$	$	$

NOTES—

(notes may be continued on the next page of this annex)

Effective Date: _____
Incorporated by modification –P000XX

ANNEX 3
to the Award Fee Plan

Award Fee Allocations and Earnings for the Production Effort (CLINs _____)

		(a) Total			(b) Management		(c) Technical		(d) Cost	
Period	Dates	(1) Available	(2) Earned	(3) Roll-Over	(1) Available	(2) Earned	(1) Available	(2) Earned	(1) Available	(2) Earned
7b	SEP2005-AUG2006	$	$		$	$	$	$	$	$
8b	SEP2006-AUG2007	$	$	$	$	$	$	$	$	$
9b	SEP2007-AUG2008	$	$	$	$	$	$	$	$	$
10b	SEP2008-AUG2009	$	$	$	$	$	$	$	$	$
11b	SEP2009-AUG2010	$	$	$	$	$	$	$	$	$
12b	SEP2010-AUG2011	$	$	$	$	$	$	$	$	$
13	SEP2011-AUG2012	$	$	$	$	$	$	$	$	$
14	SEP2012-AUG2013	$	$	$	$	$	$	$	$	$
15	SEP2013-AUG2014	$	$	$	$	$	$	$	$	$
16	SEP2014-AUG2015	$	$	$	$	$	$	$	$	$
	TOTALS:	$	$		$	$	$	$	$	$

NOTES—

(notes may be continued on the next page of this annex)

Effective Date: _____
Incorporated by modification –P000XX

ANNEX 4
to the Award Fee Plan

Mission Success Fee Events and Amounts

Event No.	MISSION SUCCESS EVENT	Available	Earned	Roll-Over
M-1	Critical Design Review Description: 30% for the completion of the segment and system CDR with the balance at the closeout of the open CDR action items	$	$	
M-2	NPP Sensors Complete and Delivered Description:50% for the successful on-time delivery of the CMIS and 50% for the on-time delivery of the VIRS	$	$	$
M-3	NPP Ground Readiness Description: 20% for the Installation of the NNP Ground Segment hardware and software, 30% for the check out of the hardware and software, 50% for the completion of training and operational readiness for the operators	$	$	$
M-4	Processing of NPP Data Description: 10% for the C3 and IDPS linked to NPP spacecraft, 10% for demonstration of spacecraft TT&C, 30% for demonstration of data record transmission from the spacecraft to the C3 and processing into the IDPS, 5% for each KPP demonstrated end-to-end, balance for all performance parameters met	$	$	$
M-5	NPOESS Ground Readiness Description: 20% for the Installation of the NNP Ground Segment hardware and software, 30% for the check out of the hardware and software, 50% for the completion of training and operational readiness for the operators	$	$	$
M-6	Processing C1 Data Description: 10% for the C3 and IDPS linked to NPOESS spacecraft, 10% for demonstration of spacecraft TT&C, 30% for demonstration of data record transmission from the spacecraft to the C3 and processing into the IDPS, 5% for each KPP demonstrated end-to-end, balance for all performance parameters met	$	$	$
M-7	Interim Operational Capability Description:5% for the C3 and IDPS linked to the second NPOESS spacecraft, 5% for the demonstration of the spacecraft TT&C, 20% for the demonstration of data transmission from the spacecraft to the C3 and IDPS, 15% for all the KPPs demonstrated, 5% for each KPP val/cal/ver completed remaining percent allocated as a ratio of additional EDRs val/cal/ver completed.	$	$	$
M-8	C3 Manufacture, Assembly, Test, Launch and On-orbit test Description: 5% for the C3 and IDPS linked to the second NPOESS spacecraft, 5% for the demonstration of the spacecraft TT&C, 20% for the demonstration of data transmission from the spacecraft to the C3 and IDPS, 15% for all the KPPs demonstrated, 5% for each KPP val/cal/ver completed remaining percent allocated as a ratio of	$	$	$

Effective Starting _____ and Ending _____
Incorporated by modification –P000XX

	additional EDRs val/cal/ver completed until FOC met.			
M-9	C4 Manufacture, Assembly, & Test Description:30% for the successful completion of production acceptance, 30% for the successful completion of IAC for launch, 40% for the successful launch and on-orbit checkout.	$	$	$
M-10	C5 Manufacture, Assembly, & Test Description: 30% for the successful completion of production acceptance, 30% for the successful completion of IAC for launch, 40% for the successful launch and on-orbit checkout.	$	$	$
M-11	C6 Manufacture, Assembly, & Test Description: 30% for the successful completion of production acceptance, 30% for the successful completion of IAC for launch, 40% for the successful launch and on-orbit checkout.	$	$	$
	TOTALS:	$	$	

NOTES—

ANNEX 5
to the Award Fee Plan

Award Fee Evaluation Criteria

1. <u>MANAGEMENT (35%)</u>

Excellent –

First Period:

- Completion of the Baseline Review Conference (BRC) to include the closeout of all action items
- Completion of the requirements allocation down to tier three of the WBS
- All elements of the EVMS on schedule and cost
- Completion of the staffing plan
- Establishment of the program IPT structure
- Systems engineering and management process demonstrated

Second Period

- Design complete for tier three elements
- Tier five and six allocations complete
- All elements of the EVMS on schedule and cost
- Long lead for the satellite complete and ready for contract release
- VISRS and CMIS on schedule for delivery to NPP
- C3 and IDPS demonstrations to meet NPP need dates are complete
- Staffing plan on target

Fully Satisfactory—

First Period:

- BRC completed and 80% of the action items closed
- Requirements allocation 80% complete
- 90% of the EVMS elements on cost and schedule targets
- 100% of the tier two structure established and 90% of the tier three IPTs and 80% of tier four IPTsStaffing levels 90% complete
- Systems engineering or management process 80% demonstrated

Second Period

- Design 90% complete for tier three elements
- Tier five and six allocations 90% complete
- 90% elements of the EVMS on schedule and cost
- 90% of the long lead for the satellite complete and ready for contract release
- VISRS and CMIS on schedule for delivery to NPP
- C3 and IDPS demonstrations to meet NPP need dates are complete
- 90% staffing levels are met

Satisfactory—

First Period

- BRC completed and less than 70% of the action items closed
- Requirements allocation 70% complete
- 80% of the EVMS elements on cost and schedule targets

- 100% of tier two structure established and 80% of tier three IPTs, and 70% of tier four IPTs
- Staffing levels 80% complete
- Systems engineering and management processes 70% demonstrated

Second Period
- Design 80% complete for tier three elements
- Tier five and six allocations 80% complete
- 80% elements of the EVMS on schedule and cost
- 80% of the long lead for the satellite complete and ready for contract release
- VISRS and CMIS on schedule for delivery to NPP
- C3 and IDPS demonstrations to meet NPP need dates are complete
- 90% staffing levels are met

Marginal—
First Period
- BRC completed and less than 60% of the action items closed
- Requirements allocation 60% complete
- 70% of the EVMS elements on cost and schedule targets
- 100% of tier two structure established and 80% of tier three IPTs, and 60% of tier four IPTs
- Staffing levels 70% complete
- Systems engineering and management processes 60% demonstrated

Second Period
- Design 70% complete for tier three elements
- Tier five and six allocations 70% complete
- 70% elements of the EVMS on schedule and cost
- 70% of the long lead for the satellite complete and ready for contract release
- VISRS and CMIS on schedule for delivery to NPP
- 80% of the C3 and IDPS demonstrations to meet NPP need dates are complete
- 90% staffing levels are met

Unsatisfactory—
First Period
- Anything less than Marginal in any category

Second Period
Any thing less than Marginal in any category

2. <u>TECHNICAL (35%)</u>

Fully Satisfactory—

Satisfactory—

Marginal—

Unsatisfactory—

3. <u>COST (30%)</u>

Fully Satisfactory—

Satisfactory—

Marginal—

Unsatisfactory—

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